Barbee's Seafood

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Executive Summary

The purpose of this document is to provide the project description, system analysis, system design, user training, program documentation, test plans, and project assessment for Barbee's Seafood. The project description covers Barbee's history, current environment, problems observed, constraints, stakeholders, and hardware and software requirements. The system analysis covers the proposed system's use case diagram and use case specifications. The system design covers the entity-relationship diagram, mock-up forms and reports, and navigation diagrams. The program documentation covers the program plan and inputs and outputs for each program. The test plans cover the data used in testing. The user training provides step by step instructions on how to use the system for everyday business processes. The documentation concludes with a project assessment.

History

In 1954, James and Doris Barbee opened a small fish market in Pine Level, NC. They expanded their business to Smithfield in 1963. In 1991, they purchased the empty Kentucky Fried Chicken building in Smithfield, NC. In 1992, they utilized the existing kitchen and started selling cooked seafood as well. The business started with carryout plates but soon added tables and chairs to accommodate customers who asked to eat inside. Soon after the business started selling cooked seafood, James and Doris Barbee's two children took over the business. Larry Barbee and Debbie Cooper are co-owners of Barbee's Seafood, Inc. Larry's three daughters worked their fair share of hours in the restaurant before going away to college. In 2008, the inside of the dining area was re-modeled.

Business Description

Larry Barbee manages the fish market with one employee to assist him with cleaning the fresh fish. Debbie Cooper's husband, Ricky, manages the kitchen with two employees to help with food preparation. They make their own tartar sauce, cocktail sauce and slaw from scratch. Debbie handles the books, payroll and scheduling. There are two full time waitresses to handle the dining area and drive-thru. An additional waitress is employed to help on Friday as it is the busiest day of the week.

Larry has three fish suppliers out of Wilmington, Edenton and Morehead City; and one oyster supplier out of Wilmington that contact him when they have fresh seafood available for purchase. Barbee's Seafood orders all of their seafood breeder, corn meal and hush puppy mix from a company named Atkinson Milling Co, Inc. They not only use this for cooking, they also sell packages in the market. They order all of the paper products from North Carolina Paper Co. They order their food supplies from Performance Foods Services and local grocery stores. Suppliers are paid at the time of delivery by check.

Employees clock in to work by writing their arrival and departure times on time cards. Debbie processes payroll manually. She recently started using QuickBooks for the business. She uses QuickBooks to post checks and deposits. This software breaks down the money into different categories; sales, fish market, restaurant, taxes, salary, supplies and purchases. Then the amount of cash that remains is deposited into the

bank. The restaurant is not set up to accept credit card payments. They only accept cash, checks and food stamps.

Why Barbee's Seafood, Inc.

One of the team members, Jessica Balazsi, worked at Barbee's Seafood during High School and has recently started working there again on Friday nights. She is really close friends with the owners.

Problems Observed with Current System

Most of Barbee's business processes are completed manually. There is not a system in place to track inventory.

Proposed System Objectives, Features and Constraints

Objective:

Create a user-friendly interface to automate Barbee's Seafood's Business Processes.

Features:

- Manage supplier information
- track inventory totals
- track inventory costs
-

Constraints

- Limited Capital
- Time

Expected Benefits of the Proposed System

- The business will save time and money by becoming more efficient.

Stakeholders

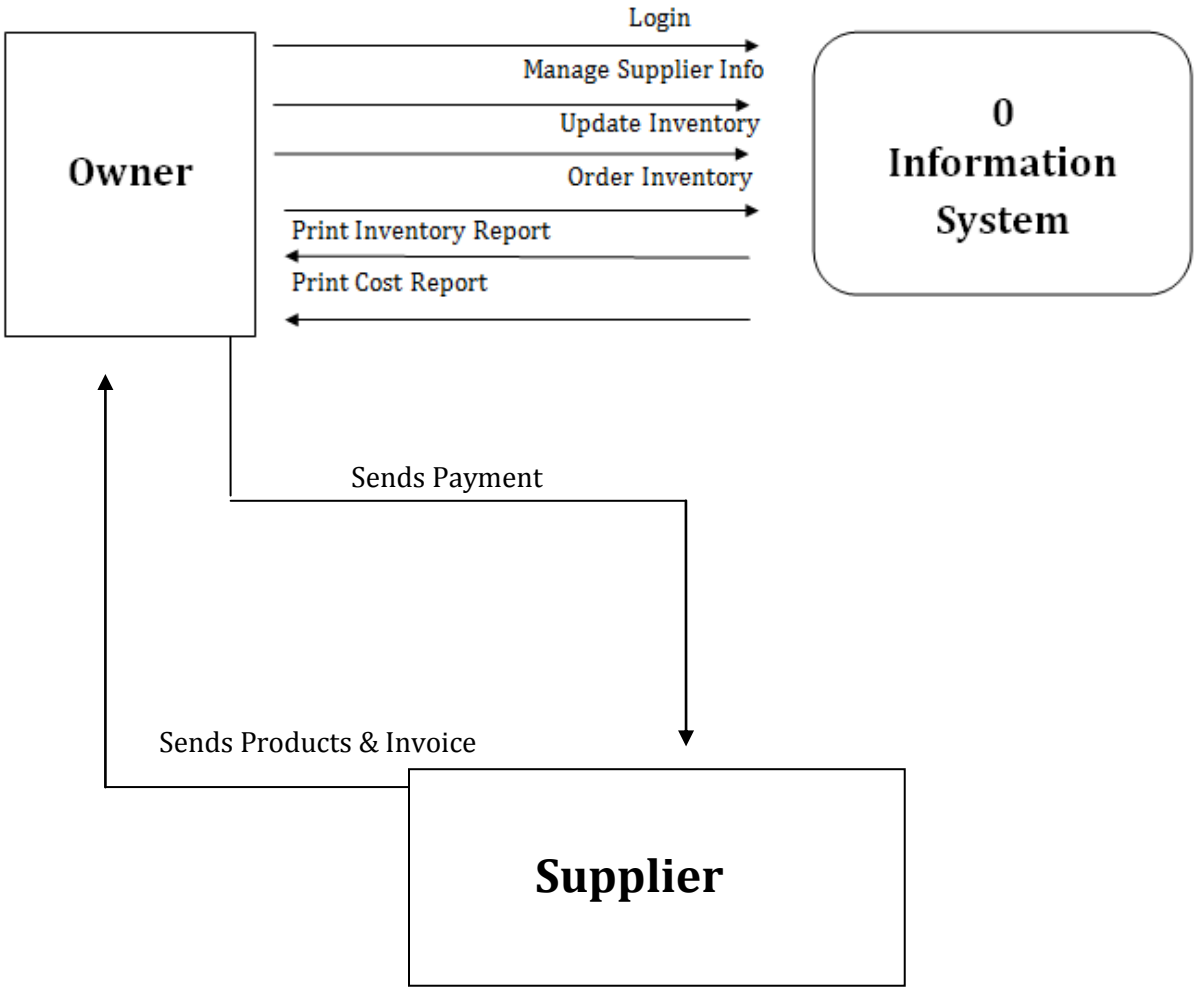
- 2 Co-Owners, Larry Barbee and Debbie Cooper
- Employees
- Suppliers
- Customers

Problem Analysis

BPA: Business Process Automation

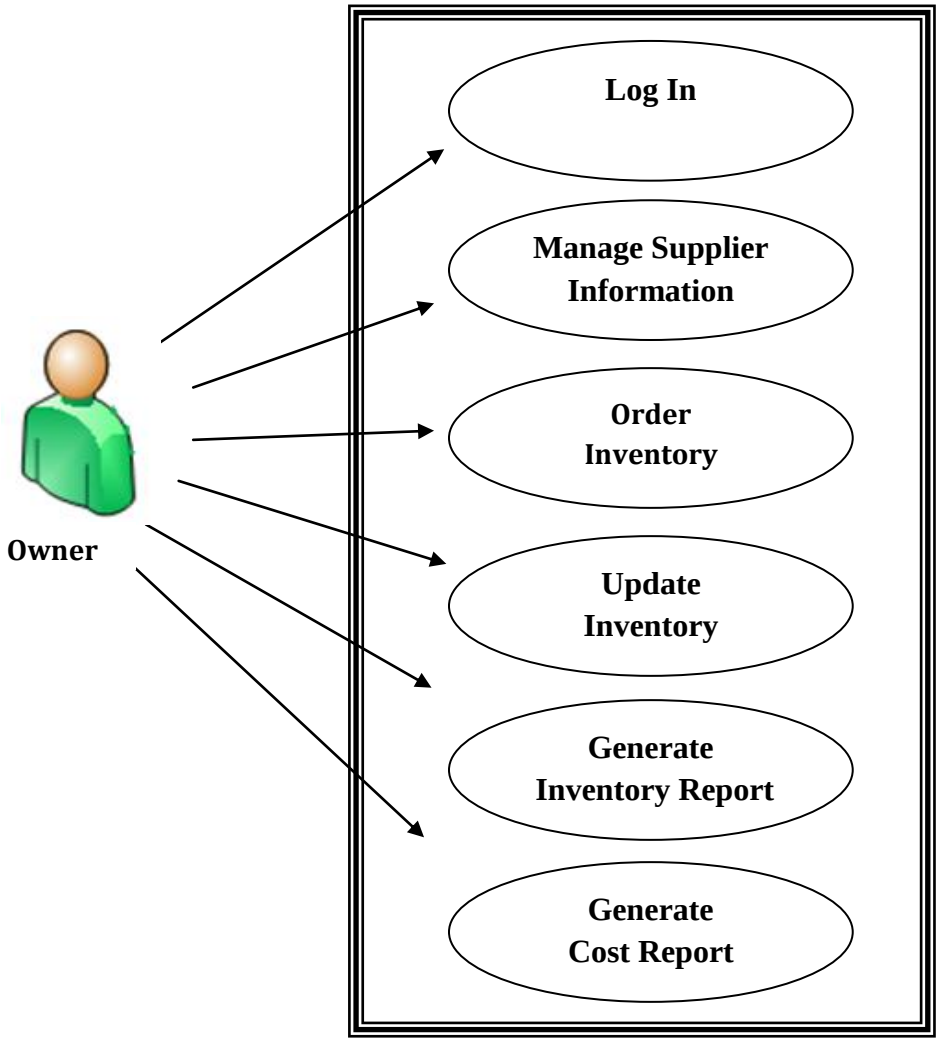
Barbee's Seafood Restaurant

Context Diagram



Barbee's Seafood Inventory System

Use Case Diagram



Use Case 1: Login

Use Case Name: **Log In**	ID: 1	Importance Level: High
Primary Actor: Owner		
Short Description: This use case describes how the owner will gain access to the system.		
Trigger: Type (External) / Temporal		

Major Inputs:		Major Outputs:	
Description	Source	Description	Destination
User Name	Owner	Access	System
Password	Owner		

Major Steps Performed	Information for Steps
1. User attempts to access any part of the system.	
2. System requires a username and password.	
3. User provides the correct username and password.	Username Password
4. User gains access to the system.	User will have access to edit, add, and delete existing inventory and supplier information.

Use Case 2: Manage Supplier Information

Use Case Name: **Manage Supplier Information**	ID: 2	Importance Level: Medium
Primary Actor: Owner		
Short Description: This use case describes how the owner will edit and add supplier information.		
Trigger: Type: External / Temporal		

Major Inputs:		Major Outputs:	
Description	Source	Description	Source
Supplier Name	Owner	Updated Contact Information	Owner
Supplier Phone Number	Owner		
Supplier Address	Owner		

Major Steps Performed	Information for Steps
1. Select "Manage Supplier Information" from main menu	
2. The system lists the existing suppliers and gives an option to add new supplier	
3. Select an existing supplier or select "New Supplier"	Supplier Name
4. Enter/Edit Supplier Name	Supplier Phone Number
5. Enter/Edit Supplier Phone Number	Supplier Address
6. Enter/Edit Supplier Address	
7. Save Updated Supplier Information	Updated supplier information will display in list of existing suppliers

Use Case 3: Order Inventory

Use Case Name: **Order Inventory**	ID: 3	Importance Level: High
Primary Actor: Owner and Supplier		
Short Description: This use case describes how new inventory is ordered from suppliers.		
Trigger: Type: External / Temporal		

Major Inputs:		Major Outputs:	
Description	Source	Description	Destination
Select Order Inventory in main menu	Owner	Order Form displayed	System
Item Name	Owner	Send Invoice and Products	Barbee's
Item Number	Owner	Payment Processed	Supplier
Contact Supplier	Owner		
Payment	Owner		
Receive and Stock	Employees		

Major Steps Performed	Information for Steps
1. Select Order Inventory from Main Menu →	Order Inventory Form displays
2. Enter Item Name ←	Item Name
	Item Number
3. Enter Item Number ←	Supplier Contact Info
4. Contact Supplier for Purchase →	Supplier receives Barbee's order and sends invoice, begins fulfilling order
5. Pay for Order ←	Payment Information
→	Order paid for
	Inventory ordered is received
6. Receive and Stock Shipment ←	
→	Shipment is stocked away and inventory is replenished.

Use Case 4: Update Inventory

Use Case Name: **Update Inventory**	ID: 4	Importance Level: High
Primary Actor: Owner		
Short Description: This use case describes how new inventory is updated into the system.		
Trigger: Type: Externa / Temporal		

Major Inputs:		Major Outputs:	
Description	Source	Description	Destination
Items Delivered	Supplier	Current Inventory	Inventory File
Items Used	Employees, Owner	Updated Inventory	Inventory File

Major Steps Performed	Information for Steps
1. Select **Update Inventory** from Main Menu	
2. Screen will prompt the user to search for the **Item Name** they want to update	Displays current inventory information
3. Screen will prompt user to either **Add Items** or **Remove Items**	
4. Screen will then prompt the user to enter the number of items the user wishes to add or remove.	Items Delivered Items Used
5. **Save** and the screen will prompt the user to search for another item name.	Inventory updated in system
6. Select **Finish** when update inventory is complete	

Use Case 5: Generate Inventory Report

Use Case Name: **Generate Inventory Report**	ID: 5	Importance Level: Medium
Primary Actor: Owner		
Short Description: This use case describes how the owner will obtain current inventory levels.		
Trigger: Type: External / Temporal		

Major Inputs:		Major Outputs:	
Description	Source	Description	Destination
Owner Request	Owner	Choose Report Displayed	System
Report Type Selection	Owner	Report Type Displayed	System
Print, save, email report	Owner	Email, save, print Report	Other Mgmt. Staff

Major Steps Performed	Information for Steps
1. User selects "Generate Inventory Report" from main menu.	Owner requests action for system to take.
	The system displays the choose report screen.
2. User picks category of item (office, seafood, veggies, cleaning supplies, etc.) or can choose to see all categories and items.	User can check inventory on several departments of food and other business related functions.
	The system displays the chosen report.
3. User chooses one or a combination of the options to print, save, or email the report created, use case ends.	Print, save, or email the created report.
	Report is sent in an email, printed and/or saved.

Use Case 6: Generate Cost Report

Use Case Name: **Cost of Inventory**	ID: 6	Importance Level: Medium
Primary Actor: Owner		
Short Description: This use case describes how the owner will obtain current inventory levels.		
Trigger: Type: Externa / Temporal		

Major Inputs:		Major Outputs:	
Description	Source	Description	Destination
Owner Request	Owner	Choose Report Displayed	System
Report Type Selection	Owner	Report Type Displayed	System
Print, save, email report	Owner	Email, save, print Report	Other Mgmt. Staff

Major Steps Performed	Information for Steps
1. User selects "Generate Inventory Report" from main menu.	Owner requests action for system to take.
	The system displays the choose report screen.
2. User picks category of item (office, seafood, veggies, cleaning supplies, etc.) or can choose to see all categories and items.	User can check inventory on several departments of food and other business related functions.
	The system displays the chosen report.
3. User chooses one or a combination of the options to print, save, or email the report created, use case ends.	Print, save, or email the created report.
	Report is sent in an email, printed and/or saved.

System Level Non-Functional Requirements

1) **Reliability.** The system should be accessible at all times.

2) **Security.** The system should be able to protect data against internal and external dangers.

3) **User Friendliness.** The system should allow the user elasticity.

4) **Timeliness.** The system should report assessment response messages ASAP.

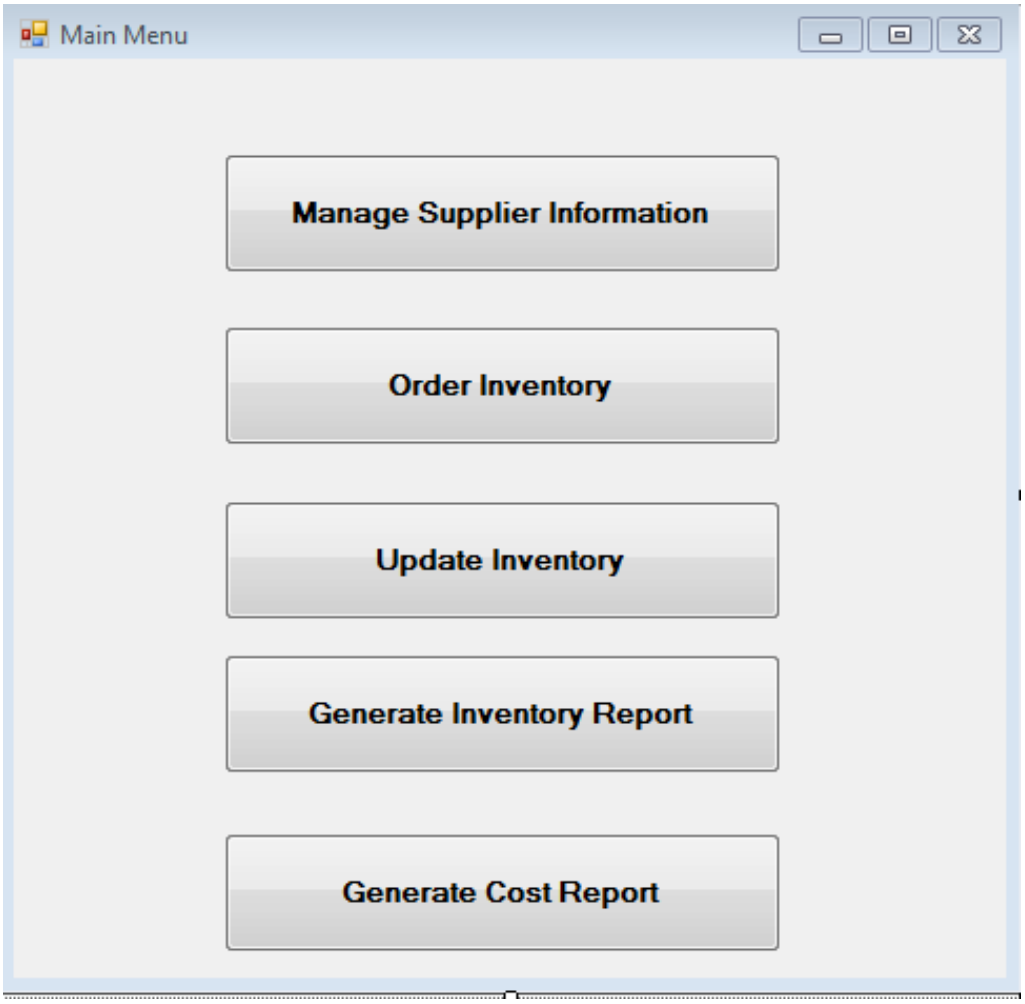
5) **Relevance.** The system should deliver applicable data.

6) **Accuracy.** The system should deliver precise data.

7) **Supportability.** The system should allow approved users to make any changes required.

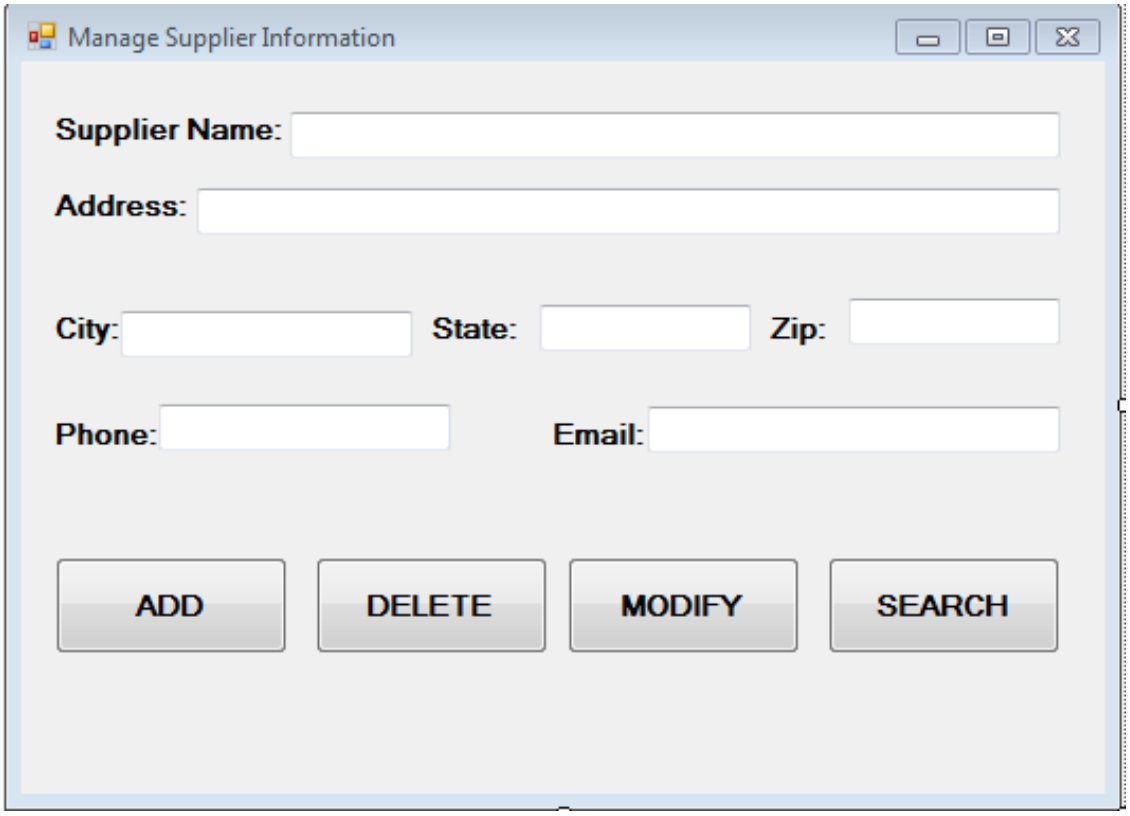
Mock-Up Forms

Main Menu

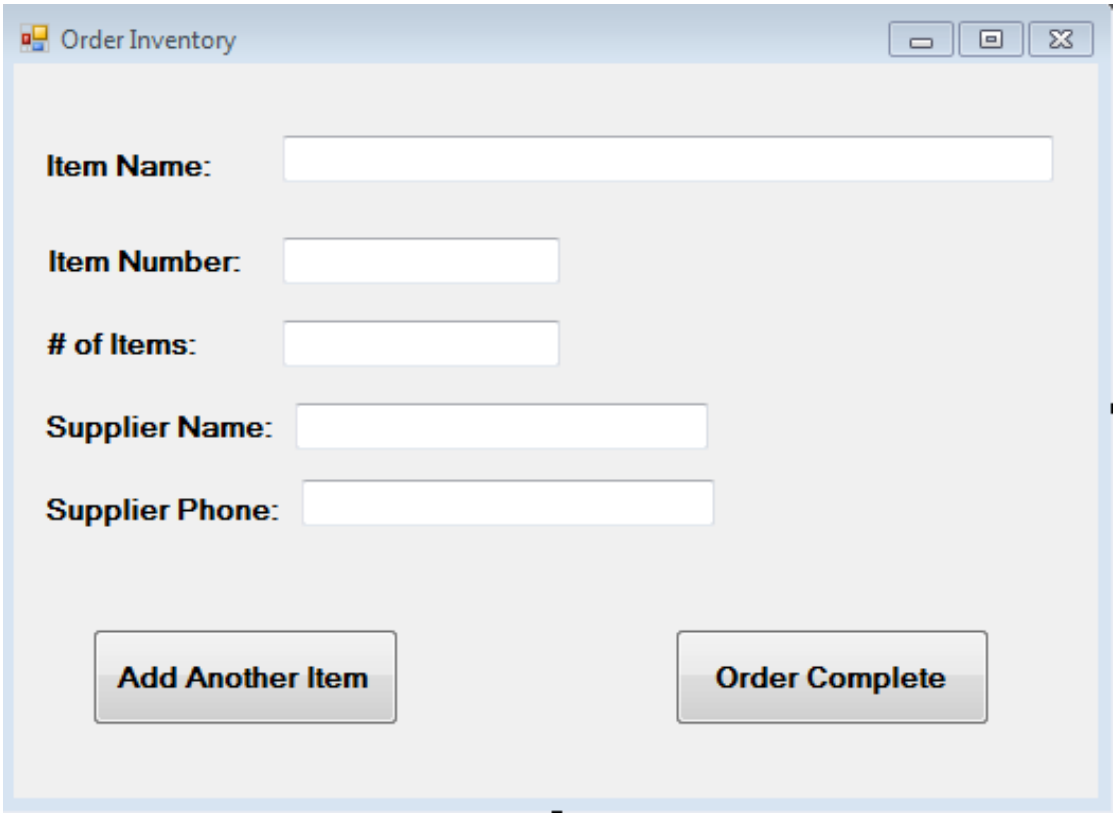

Main Menu
Manage Supplier Information
Order Inventory
Update Inventory
Generate Inventory Report
Generate Cost Report

Login

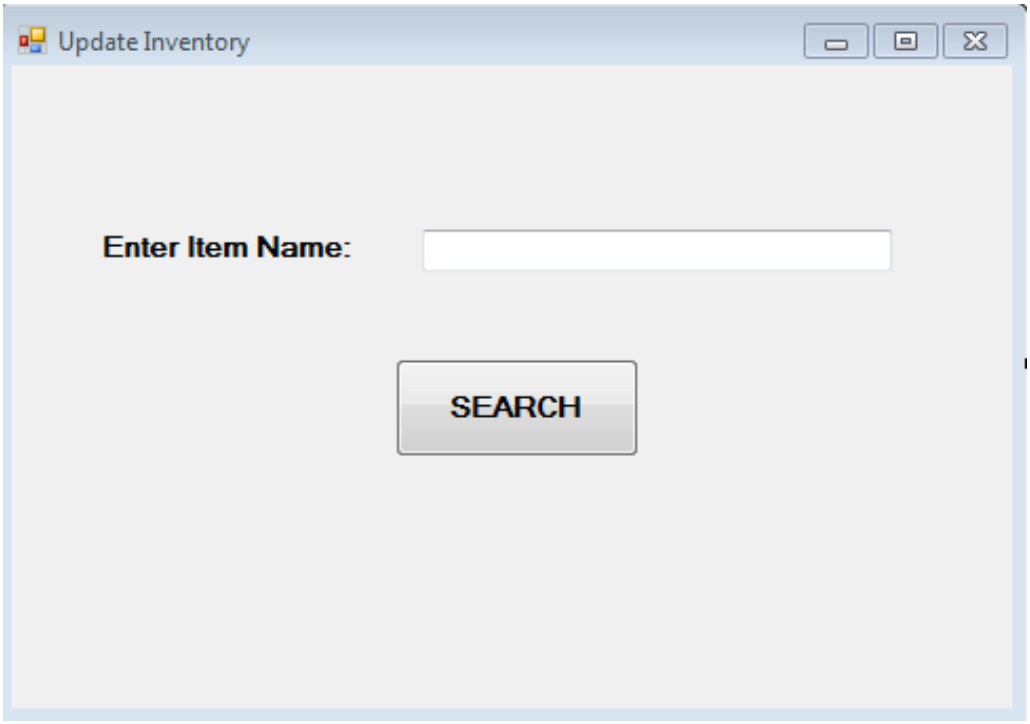
Manage Supplier Information



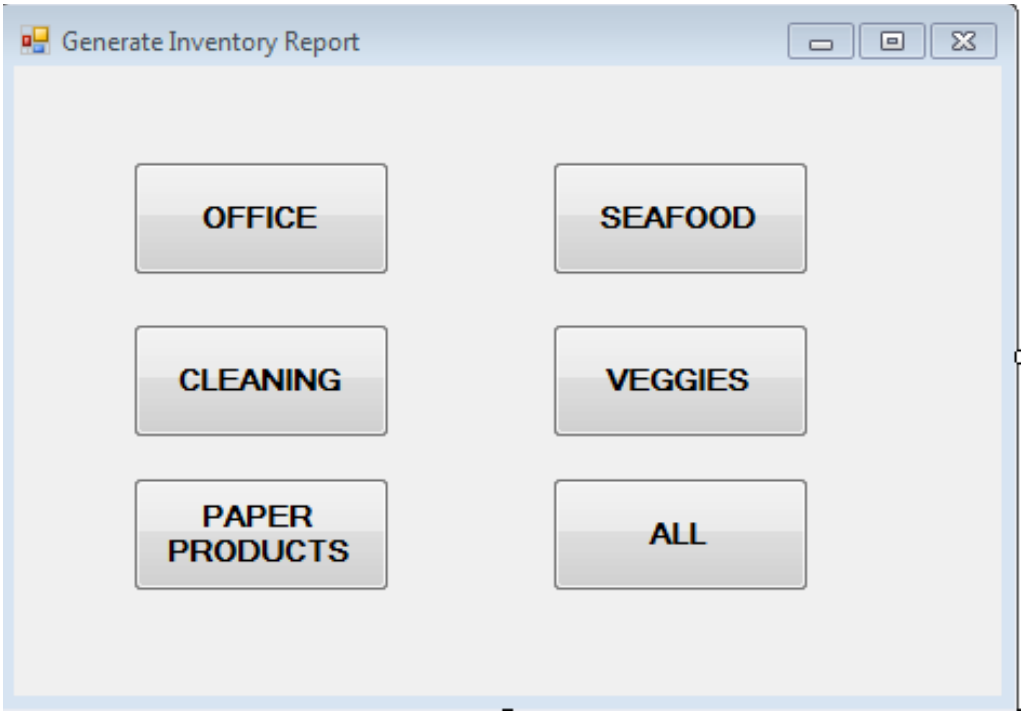
Order Inventory



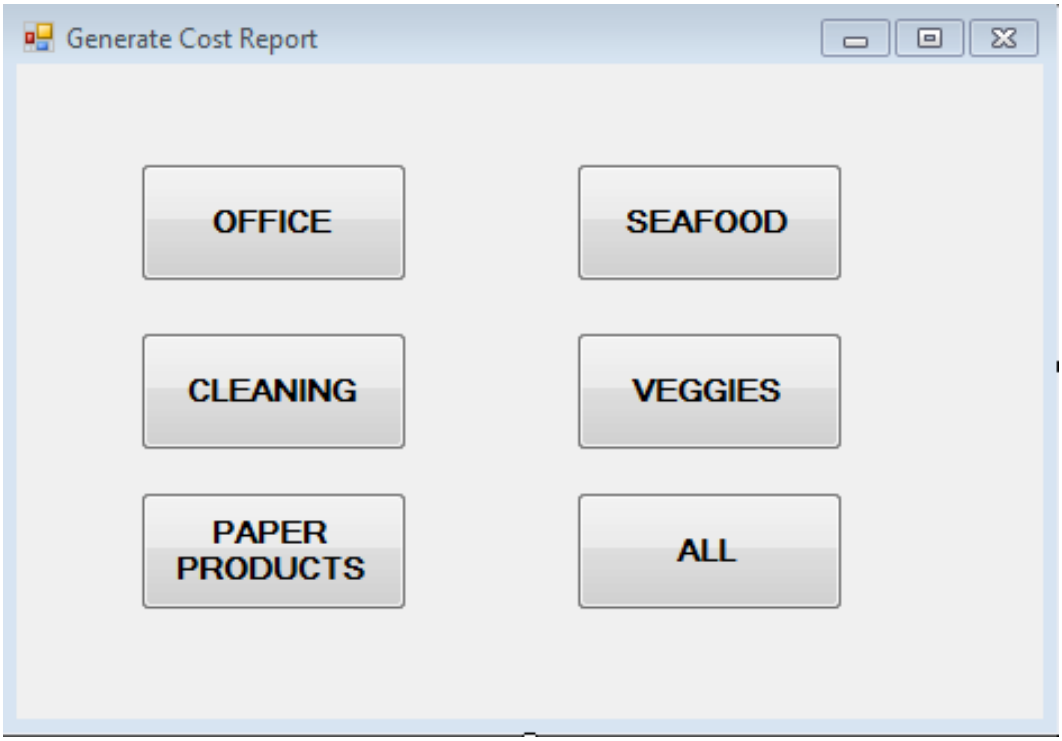
Update Inventory



Generate Inventory Report

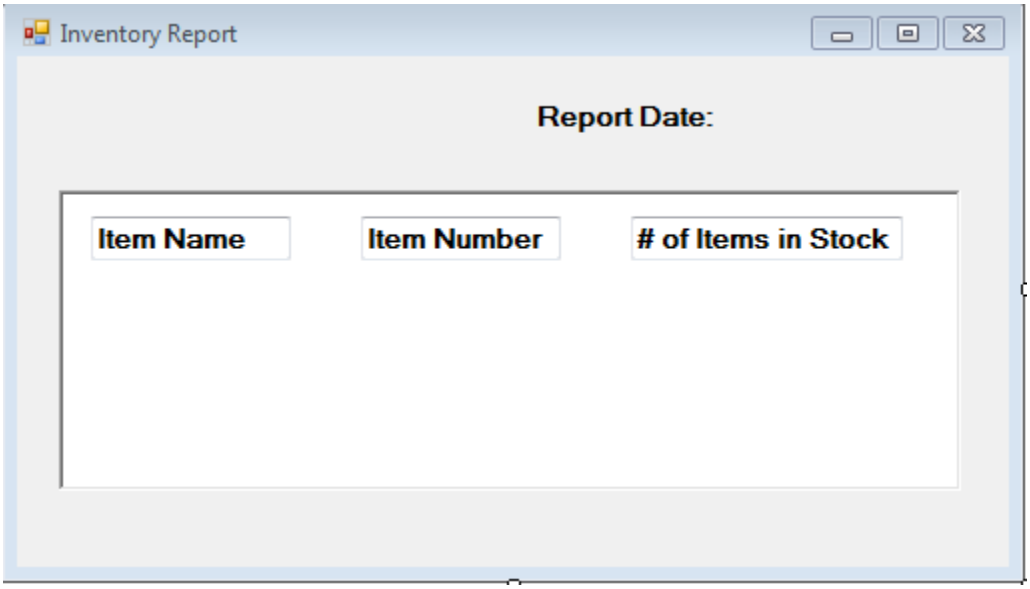


Generate Cost Report

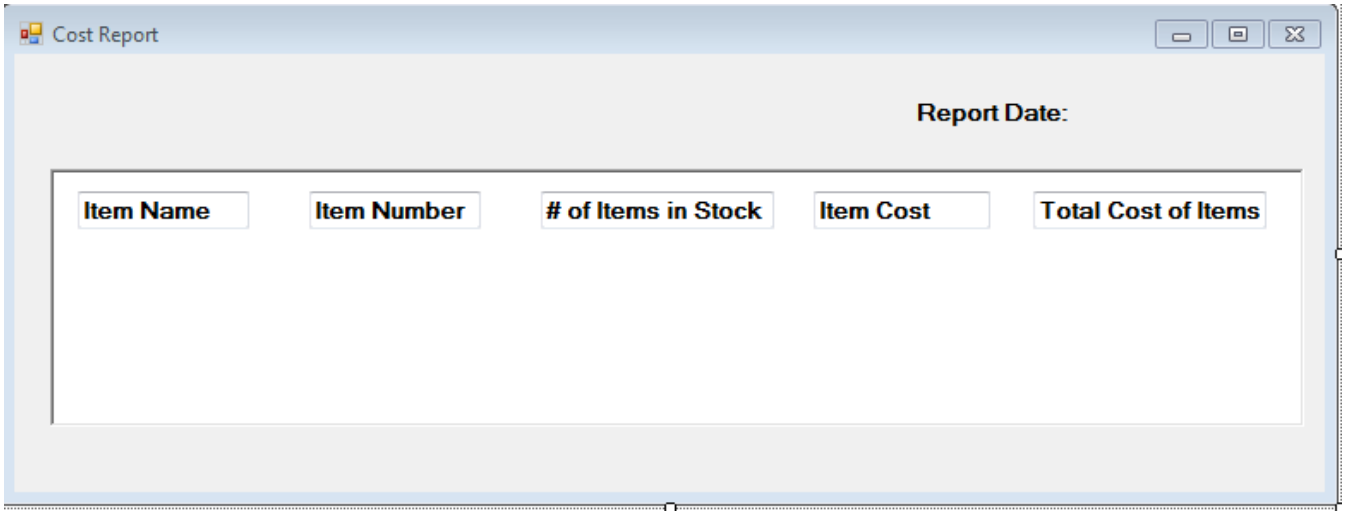


Mock-Up Reports

Generate Inventory Report

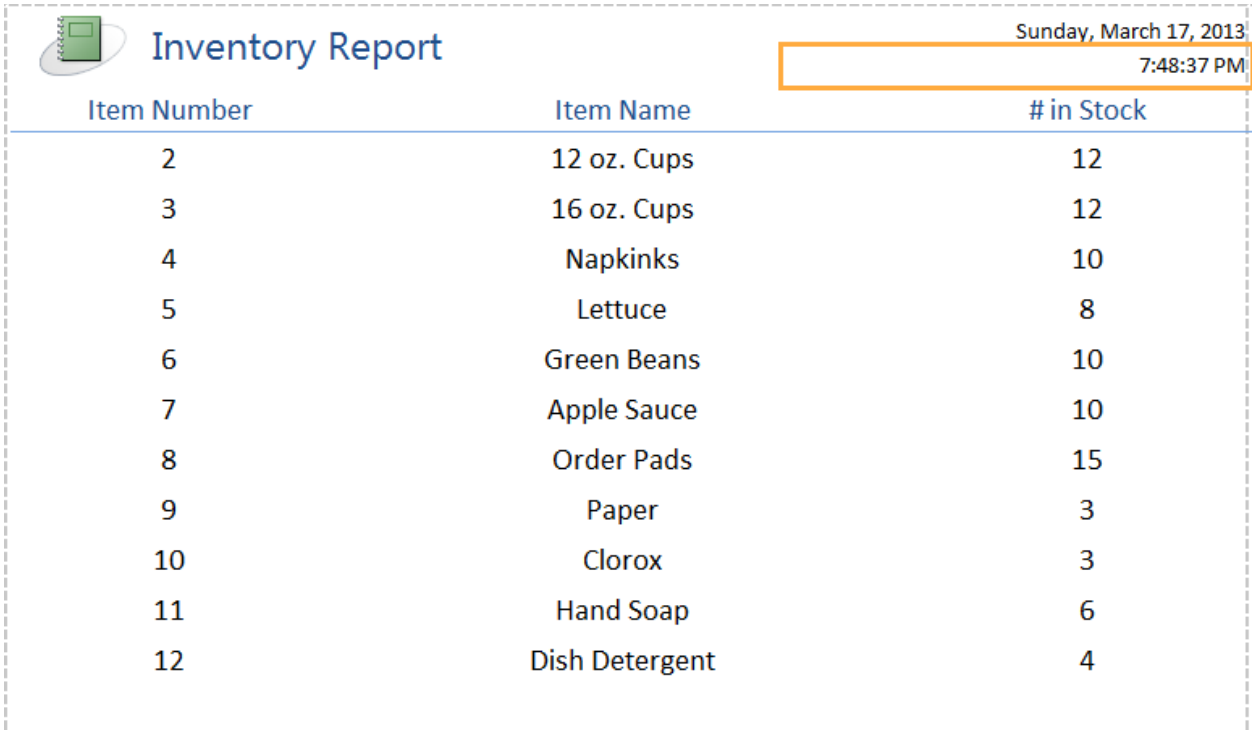


Generate Cost Report



Sample Reports

Inventory Report



Inventory Report

Sunday, March 17, 2013
7:48:37 PM

Item Number	Item Name	# in Stock
2	12 oz. Cups	12
3	16 oz. Cups	12
4	Napkinks	10
5	Lettuce	8
6	Green Beans	10
7	Apple Sauce	10
8	Order Pads	15
9	Paper	3
10	Clorox	3
11	Hand Soap	6
12	Dish Detergent	4

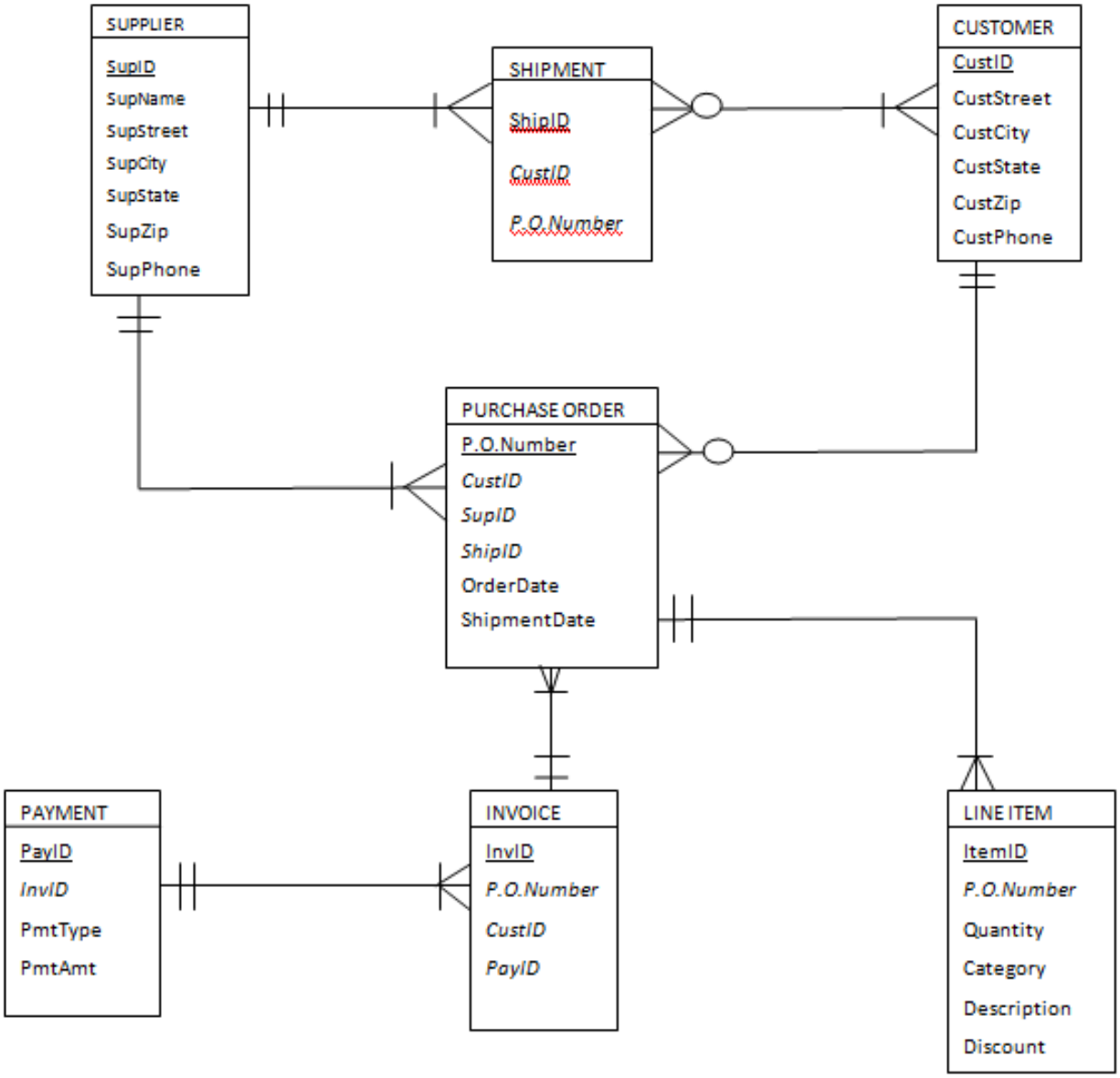
Cost Report

Cost Report

Sunday, March 17, 2013
7:44:07 PM

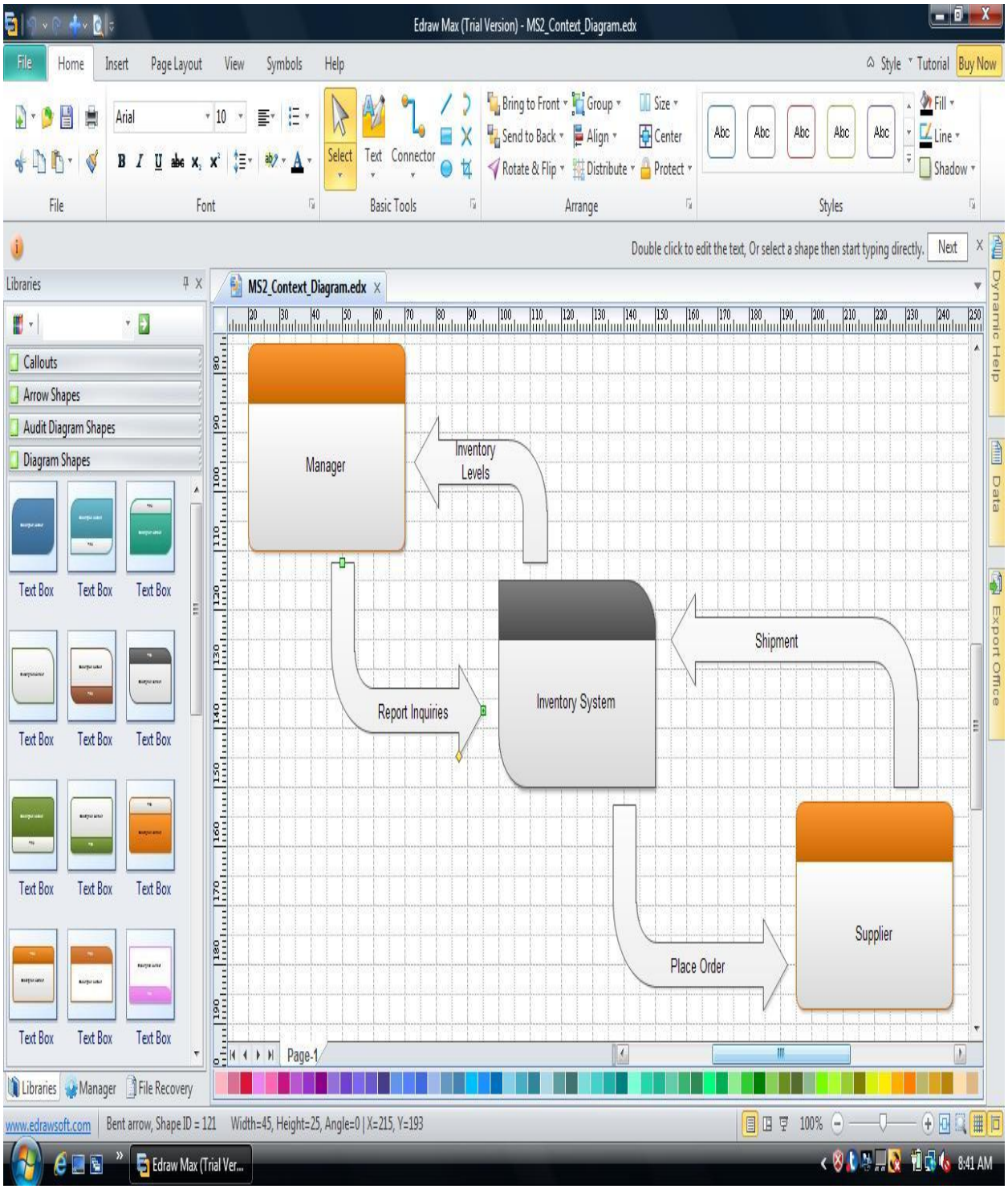
Item Number	Item Name	# in Stock	Item Cost	Total Cost of Items
2	12 oz. Cups	12	$2.49	$29.88
3	16 oz. Cups	12	$2.69	$32.28
4	Napkinks	10	$3.99	$39.90
5	Lettuce	8	$0.99	$7.92
6	Green Beans	10	$6.99	$69.90
7	Apple Sauce	10	$5.99	$59.90
8	Order Pads	15	$1.99	$29.85
9	Paper	3	$3.99	$11.97
10	Clorox	3	$2.50	$7.50
11	Hand Soap	6	$1.99	$11.94
12	Dish Detergent	4	$3.99	$15.96

Entity Relationship Diagram

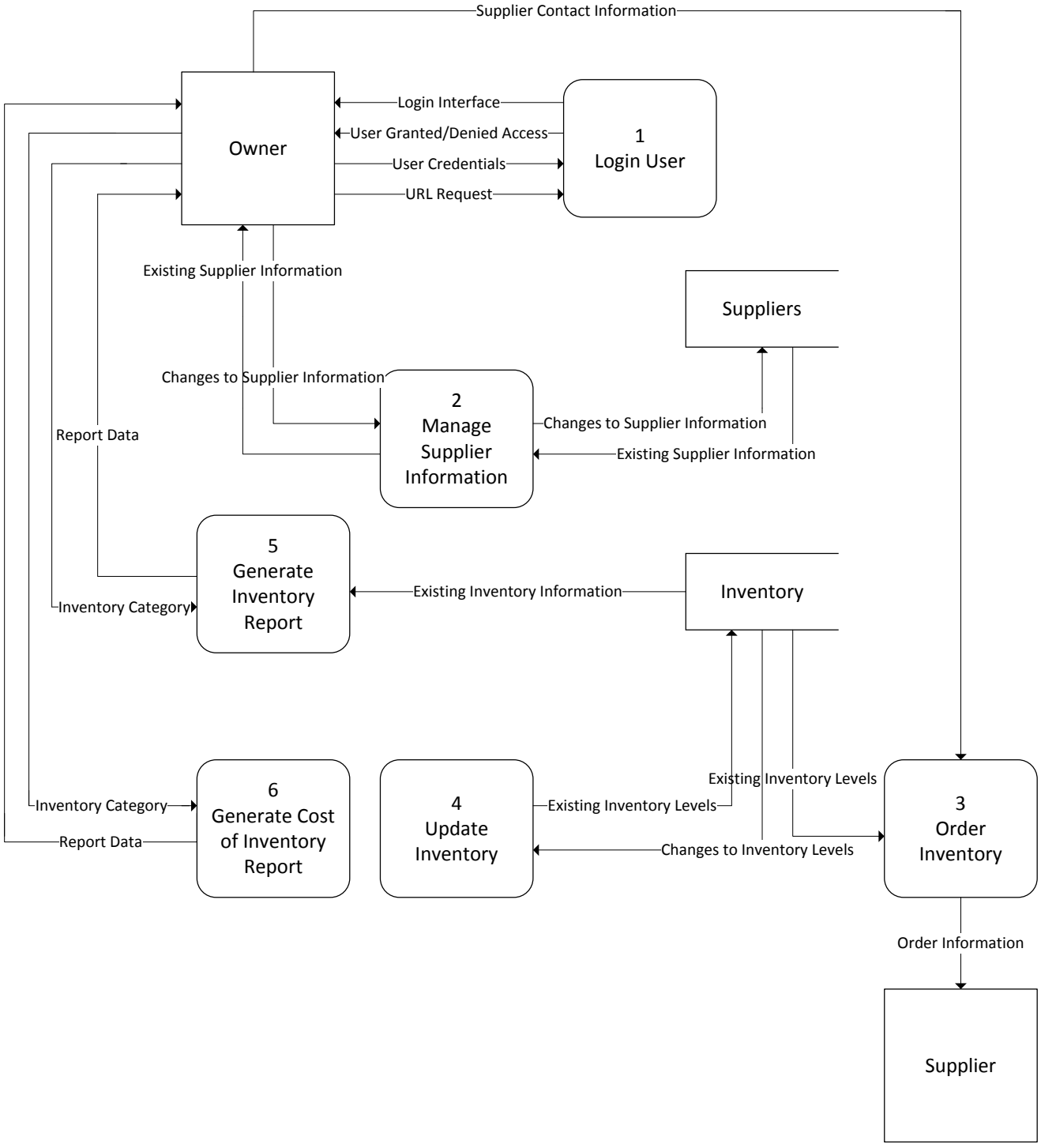

SUPPLIER
SupID
SupName
SupStreet
SupCity
SupState
SupZip
SupPhone
SHIPMENT
ShipID
CustID
P.O.Number
CUSTOMER
CustID
CustStreet
CustCity
CustState
CustZip
CustPhone
PURCHASE ORDER
P.O.Number
CustID
SupID
ShipID
OrderDate
ShipmentDate
PAYMENT
PayID
InvID
PmtType
PmtAmt
INVOICE
InvID
P.O.Number
CustID
PayID
LINE ITEM
ItemID
P.O.Number
Quantity
Category
Description
Discount

Data Flow Diagrams

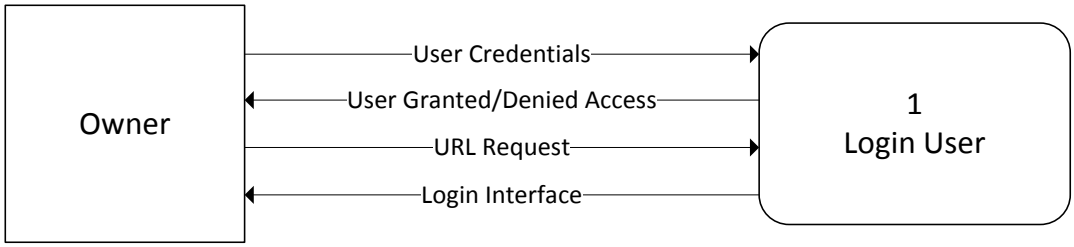
Context Diagram



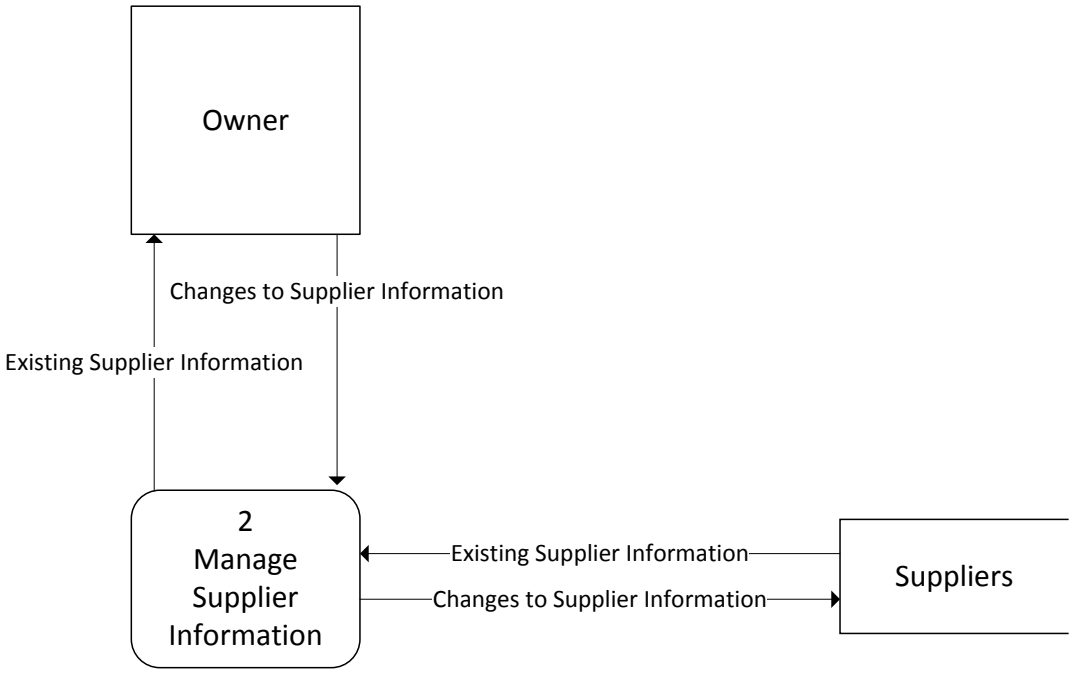
Level 0 Data Flow Diagram



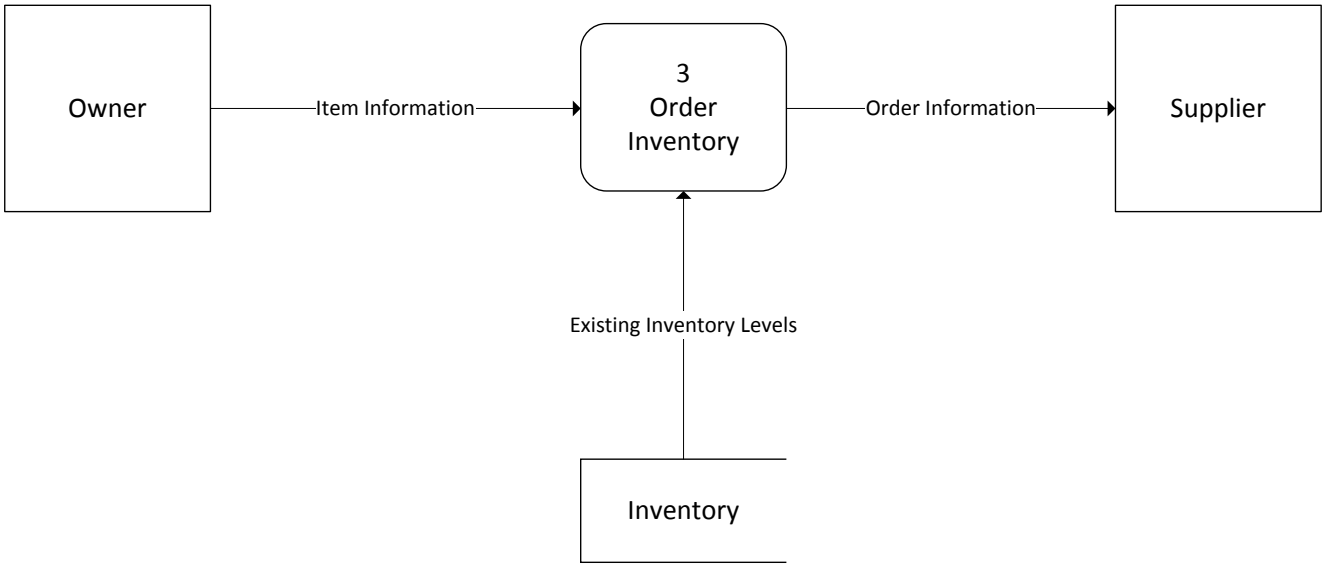
Data Flow Diagram: Login



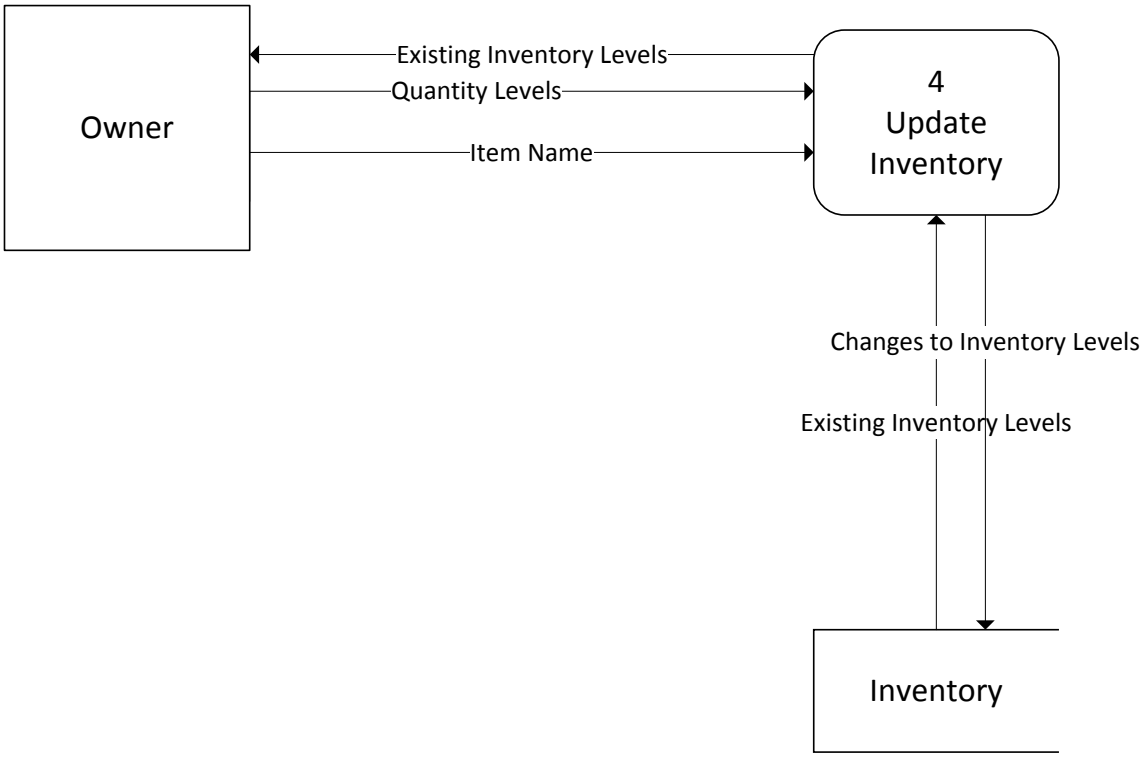
Data Flow Diagram: Manage Supplier Information



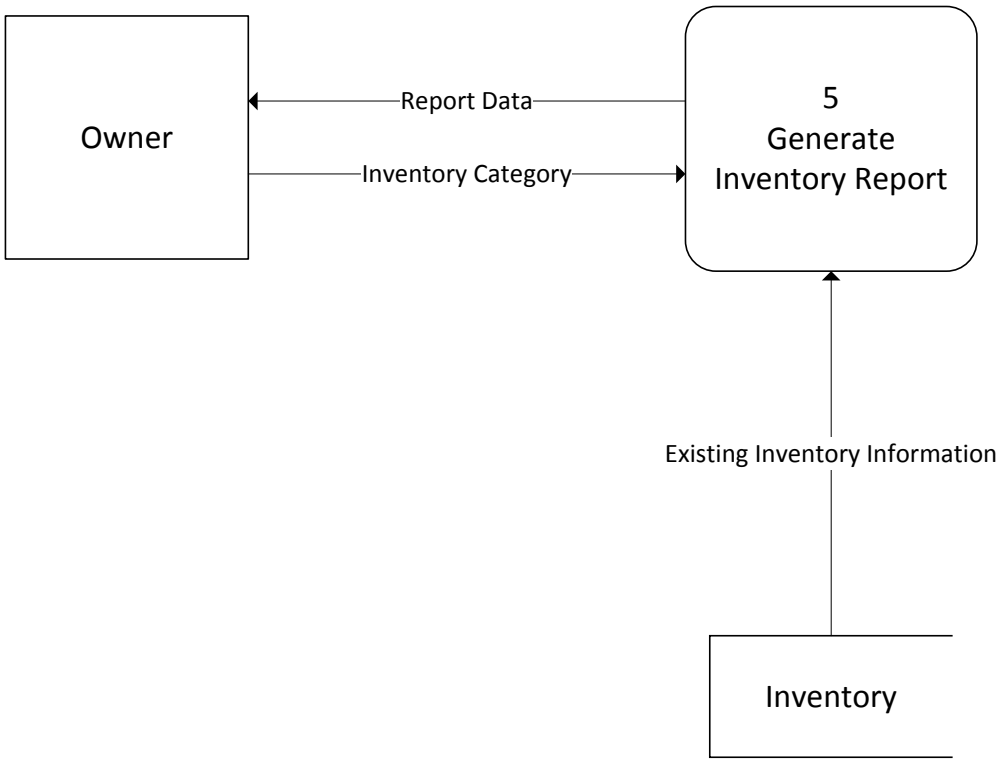
Data Flow Diagram: Order Inventory



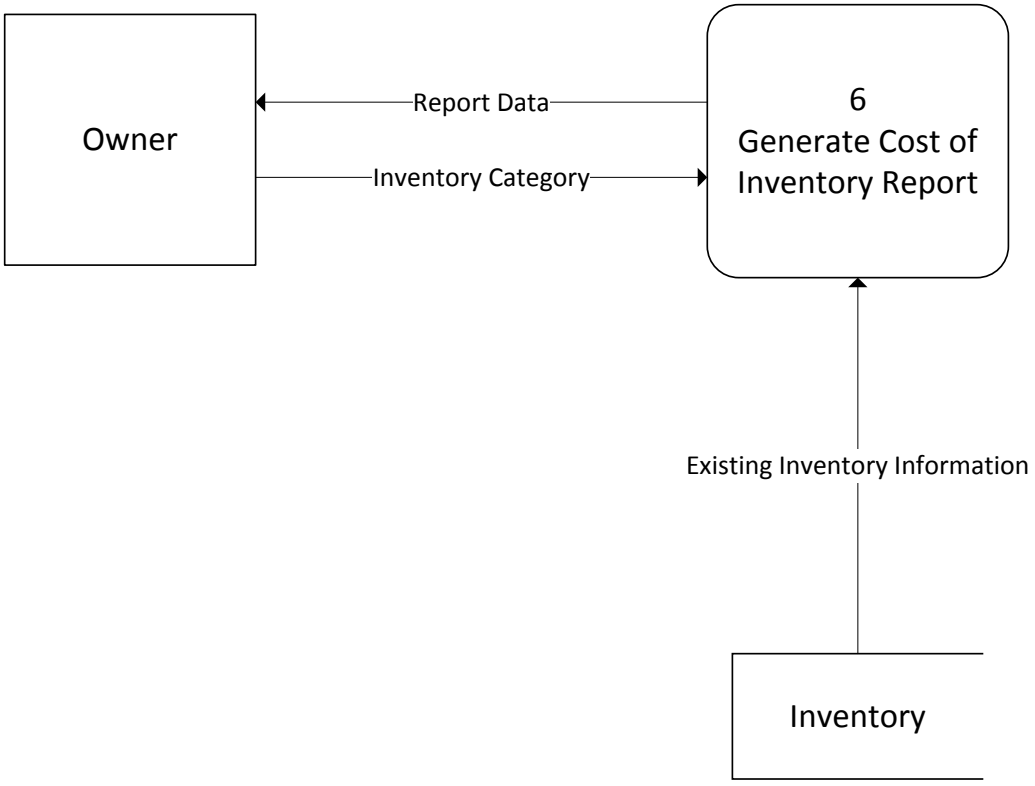
Data Flow Diagram: Update Inventory



Data Flow Diagram: Inventory Report



Data Flow Diagram: Cost Report



Program Plan

Program Number One:

Name: Find_Item_By_Name

Purpose: Display basic inventory information using an item name by the user.

Programmer: Barbee's Seafood Team

Date Due: March 21, 2013

Events:

Input Name	Type	Used By	Notes
Item Name	Visual Basic Program	Barbee's Seafood Owner	

Output Name	Type	Provided By	Notes
Item ID		Visual Basic Program	Used to locate inventory by name.

Pseudocode:

(Find_Item Module)

For all Item in Inventory Table

    If user Item Name matches, save Item Name

    Found=True

    End if

End For

Return

Program Specification for Barbee's Seafood

Program Number Two:

Name: Update_Inventory_By_Name

Purpose: Display updated inventory information by the user.

Programmer: Barbee's Seafood Team

Date Due: March 21, 2013

Events:

Input Name	Type	Used By	Notes
Update Inventory	Visual Basic Program	Barbee's Seafood Owner	

Output Name	Type	Provided By	Notes
Update IN_ID		Visual Basic Program	Used to update inventory.

Pseudocode:

(Update_Inventory Module)

For all Inventory in Inventory Table

    If user Updates Inventory, save Item Name

    Found=True

    End if

End For

Return

Program Specification for Barbee's Seafood

Program Number Three:

Name: Find_Supplier_By_Name

Purpose: Display Supplier Name by the user.

Programmer: Barbee's Seafood Team

Date Due: March 21, 2013

Events:

Input Name	Type	Used By	Notes
Find Supplier	Visual Basic Program	Barbee's Seafood Owner	

Output Name	Type	Provided By	Notes
Find Supplier_Name		Visual Basic Program	Used to locate supplier name.

Pseudocode:

(Find_Supplier Module)

For all Supplier Name Table

    If user Finds Supplier, save Item Name

    Found=True

    End if

End For

Return

Challenges, Problems, Discoveries

Explanation of any challenges, problems, and discoveries encountered.

Our group realized that one of the main challenges in software development is gathering clear business requirements. We believe when a project fails, program developers usually fault lack of clear business requirements or the lack of communication from the business to notify them of changing requirements.

Our group believes that program developers should take responsibility for their projects and make it their responsibility to complete an efficient and effective program. Our group researched and concluded that many business users usually think they're communicating their requirements clearly, but once the software is built they realize they've asked for the wrong functionality.

This was clearly one of our challenges when constructing our milestone project, but one of the strategies we used to address this issue was to use a responsive approach that builds the system in increments and gets the business users to review every increment built.

Our group truly believes if the requirement is not addressed as the users expects, the issue can be dealt before the system is live. This can save a lot of time, money and in many cases hard work. Given this strong fact and observation, our group approached this challenge and clearly mutually identified any possible communication issues with Barbee's Seafood ownership and proceed forward.

Test Plans

Test Data

Supplier

SUPPLIER

SupID	SupName	SupStreet	SupCity	SupState	SupZip	SupPhone
1	Atkinson Milling Co, Inc.	95 Atkinson Mill Rd.	Selma	NC	27576	919-965-3547
2	North Carolina Paper Co.	114 W. Main St.	Clayton	NC	27520	919-553-3313
3	Performance Foodservice	3501 Old Oakwood Rd.	Oakwood	GA	30566	770-532-7779
4	Seaview Crab Company	6458 Carolina Beach Rd.	Wilmington	NC	28412	910-793-0404
5	Capt. Jim's Seafood Market	4665 Arendell St.	Morehead City	NC	28557	252-726-3454
6	Murray L Nixon Fishery, Inc.	1141 Nixon Fishery Rd.	Edenton	NC	27932	252-221-4115
7	Greenville Loop Seafood	5820 Greenville Loop Rd.	Wilmington	NC	28409	910-791-1142

Customer

CUSTOMER

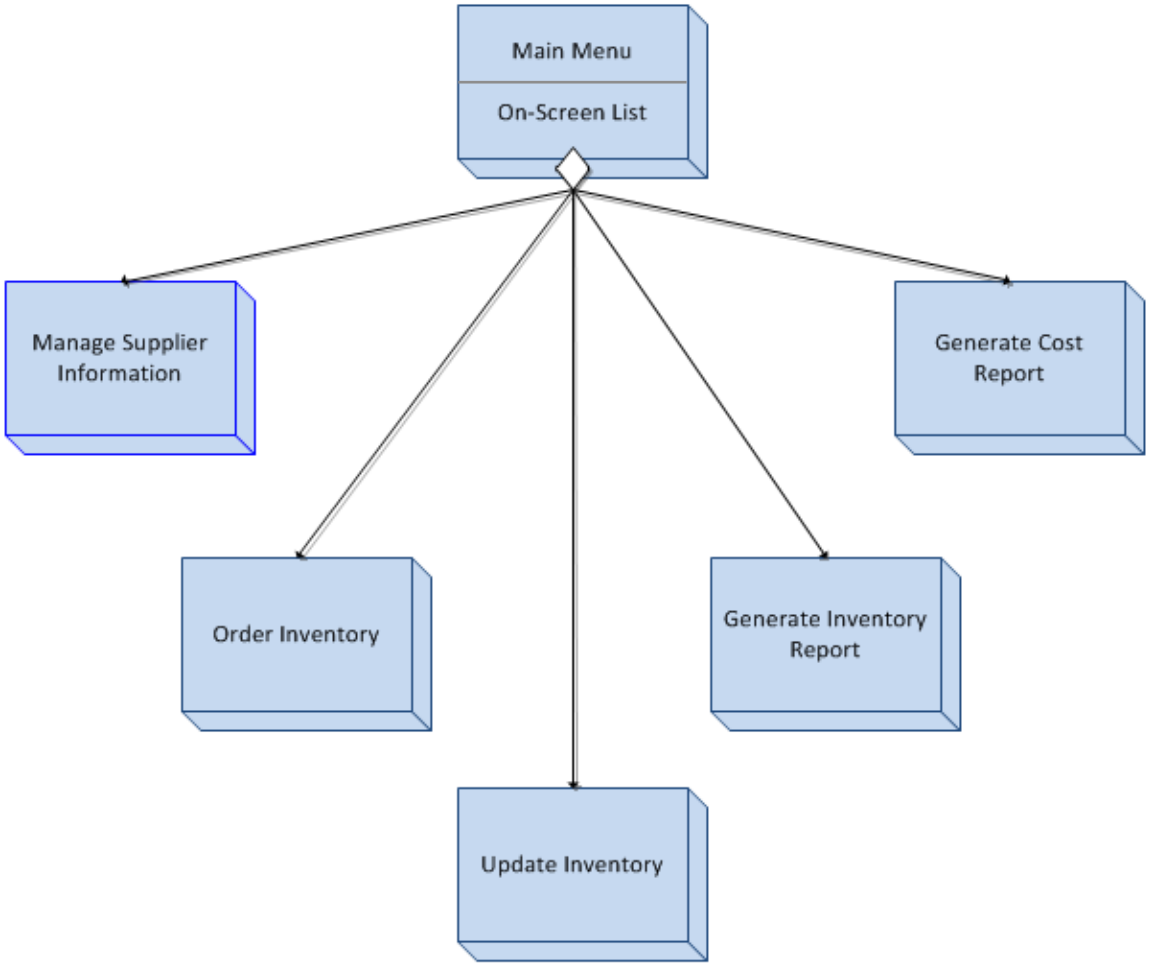
CustID	CustName	CustStreet	CustCity	CustState	CustZip	CustPhone
1	Barbee's Seafood	728 N. Brightleaf Blvd.	Smithfield	NC	27577	919-934-7244

Inventory

LINE ITEM

ItemID	ItemName	ItemQty	ItemCtgy	ItemCost	SupName
1	12 oz. Cups	12	Paper Products	$2.49	North Carolina Paper Co.
2	16 oz. Cups	12	Paper Products	$2.69	North Carolina Paper Co.
3	12 oz. Lids	12	Paper Products	$1.49	North Carolina Paper Co.
4	16 oz. Lids	12	Paper Products	$1.69	North Carolina Paper Co.
5	Napkins	10	Paper Products	$3.99	North Carolina Paper Co.
6	Lettuce	8	Veggies	$0.99	Performance Foodservice
7	Green Beans	10	Veggies	$6.99	Performance Foodservice
8	Apple Sauce	10	Veggies	$5.99	Performance Foodservice
9	Order Pads	15	Office	$1.99	North Carolina Paper Co.
10	Paper	3	Office	$3.99	North Carolina Paper Co.
11	Clorox	3	Cleaning	$2.50	Performance Foodservice
12	Hand Soap	6	Cleaning	$1.99	Performance Foodservice
13	Dish Detergent	4	Cleaning	$3.99	Performance Foodservice
14	Large Shrimp	4	Seafood	$26.99	Capt. Jim's Seafood Market
15	Baby Shrimp	3	Seafood	$24.99	Capt. Jim's Seafood Market
16	Flounder	6	Seafood	$19.99	Seaview Crab Company
17	Sea Mullet	5	Seafood	$14.99	Seaview Crab Company
22	Croaker	3	Seafood	$14.99	Seaview Crab Company
23	Trout	3	Seafood	$12.99	Murray L Nixon Fishery, Inc.
24	Catfish	2	Seafood	$10.99	Murray L Nixon Fishery, Inc.
25	Oysters	4	Seafood	$19.99	Greenville Loop Seafood

Testing Separate Modules



Test Plan

Program ID: Barbee's Seafood **Version number:** _____

Tester: Tom Hicks **Date designed:** _____ **Date conducted:** _____

Results: **__ Passed** **__ Open items:**

Test ID: _____ **Requirement addressed:** Add Supplier Information

Objective:

Test cases

Interface ID	Data Field	Value Entered
1. Manage Supplier Info	Supplier Name	Atkinson Milling Co., Inc.
2. Manage Supplier Info	Address	95 Atkinson Mill Rd.
3. Manage Supplier Info	City	Selma
4. Manage Supplier Info	State	NC
5. Manage Supplier Info	Zip	27576
6. Manage Supplier Info	Phone	919-965-3547

Script

Expected results/notes

Actual results/notes

Test Plan

Program ID: _____ Version number: _____

Tester: _____ Date designed: _____ Date conducted: _____

Results: __ Passed __ Open items:

Test ID: _____ Requirement addressed: _____

Objective:

Test cases

	Interface ID	Data Field	Value Entered
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

Script

Expected results/notes

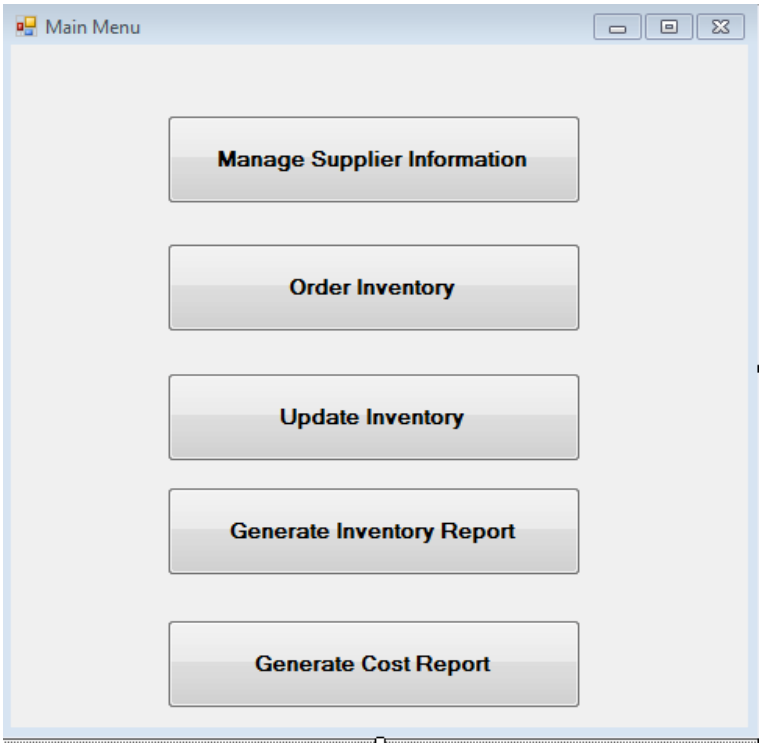
Actual results/notes

User Manual

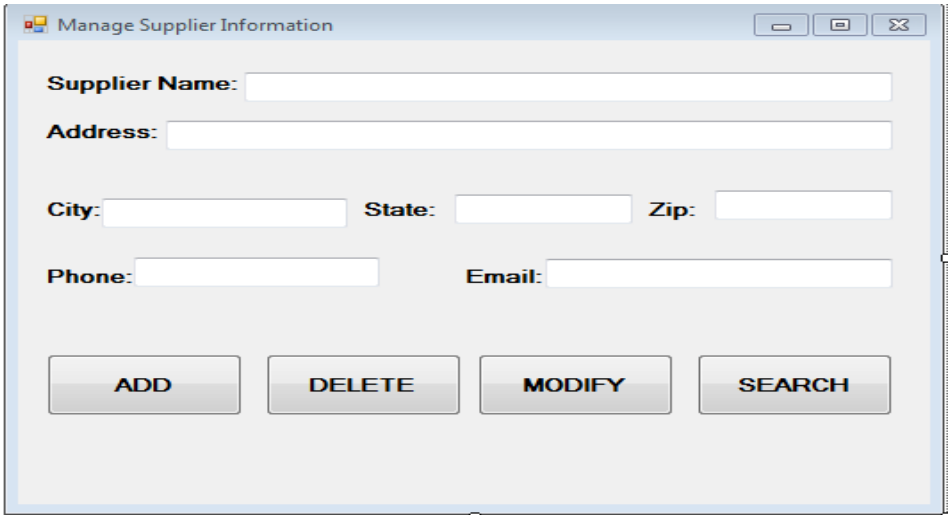
How to Manage Supplier Information:

Login to the Barbee's Seafood system using your username and password.

If login is successful, the main menu screen will appear. Select "Manage Supplier Information."



Once a user selects “Manage Supplier Information,” the Manage Supplier Information screen will appear. The user will notice individual fields where the supplier’s name, address, city, state, ZIP, phone number, and e-mail address can be entered. The user will also notice the “ADD”, “DELETE”, “MODIFY”, and “SEARCH” buttons located at the bottom of the form.



Add a New Supplier:

The user will fill out the form, entering the supplier’s name, address, city, state, ZIP, phone number, and e-mail address, if available. Once supplier’s pertinent information has been entered, the user will click the “ADD” button located at the bottom of the form to add the information to the supplier database. The user will be greeted by a list of all existing suppliers and their respective contact information. The supplier information that was recently entered will also be found in this list.

SupID	SupName	SupStreet	SupCity	SupState	SupZip	SupPhone
1	Atkinson Milling Co, Inc.	95 Atkinson Mill Rd.	Selma	NC	27576	919-965-3547
2	North Carolina Paper Co.	114 W. Main St.	Clayton	NC	27520	919-553-3313
3	Performance Foodservice	3501 Old Oakwood Rd.	Oakwood	GA	30566	770-532-7779
4	Seaview Crab Company	6458 Carolina Beach Rd.	Wilmington	NC	28412	910-793-0404
5	Capt. Jim's Seafood Market	4665 Arendell St.	Morehead City	NC	28557	252-726-3454
6	Murray L Nixon Fishery, Inc.	1141 Nixon Fishery Rd.	Edenton	NC	27932	252-221-4115
7	Greenville Loop Seafood	5820 Greenville Loop Rd.	Wilmington	NC	28409	910-791-1142

Delete an Existing Supplier:

The user will fill out the form, entering the supplier's name, address, city, state, ZIP, phone number, and e-mail address, if available. Once supplier's pertinent information has been entered, the user will click the "DELETE" button located at the bottom of the form to add the information to the supplier database. The user will be prompted to either confirm supplier removal from the database by clicking "OK" or cancel the operation by clicking "CANCEL". If confirmed, the user will then be greeted by the updated supplier list which no longer includes the deleted entry.

SupID	SupName	SupStreet	SupCity	SupState	SupZip	SupPhone
1	Atkinson Milling Co, Inc.	95 Atkinson Mill Rd.	Selma	NC	27576	919-965-3547
2	North Carolina Paper Co.	114 W. Main St.	Clayton	NC	27520	919-553-3313
3	Performance Foodservice	3501 Old Oakwood Rd.	Oakwood	GA	30566	770-532-7779
4	Seaview Crab Company	6458 Carolina Beach Rd.	Wilmington	NC	28412	910-793-0404
5	Capt. Jim's Seafood Market	4665 Arendell St.	Morehead City	NC	28557	252-726-3454
6	Greenville Loop Seafood	5820 Greenville Loop Rd.	Wilmington	NC	28409	910-791-1142

Modify an Existing Supplier:

The user will fill out the form, entering the supplier's name, address, city, state, ZIP, phone number, and e-mail address, if available. Once the supplier's pertinent information has been entered, the user will click the "MODIFY" button. The program will then find the corresponding entry and update the entry based on the changes made within the form. The user will be greeted by a list of all existing suppliers and their respective contact information. The user will find the supplier's information has been updated appropriately.

SupID	SupName	SupStreet	SupCity	SupState	SupZip	SupPhone
1	Atkinson Milling Co, Inc.	95 Atkinson Mill Rd.	Selma	NC	27576	919-965-3547
2	North Carolina Paper Co.	114 W. Main St.	Clayton	NC	27520	919-553-3313
3	Performance Foodservice	3501 Old Oakwood Rd.	Oakwood	GA	30566	770-532-7779
4	Seaview Crab Company	6458 Carolina Beach Rd.	Wilmington	NC	28412	910-793-0404
5	Capt. Jim's Seafood Market	4665 Arendell St.	Morehead City	NC	28557	252-726-3454
6	Greenville Loop Seafood	6622 Greenville Loop Rd.	Wilmington	NC	28409	910-708-1133

Search for an Existing Supplier:

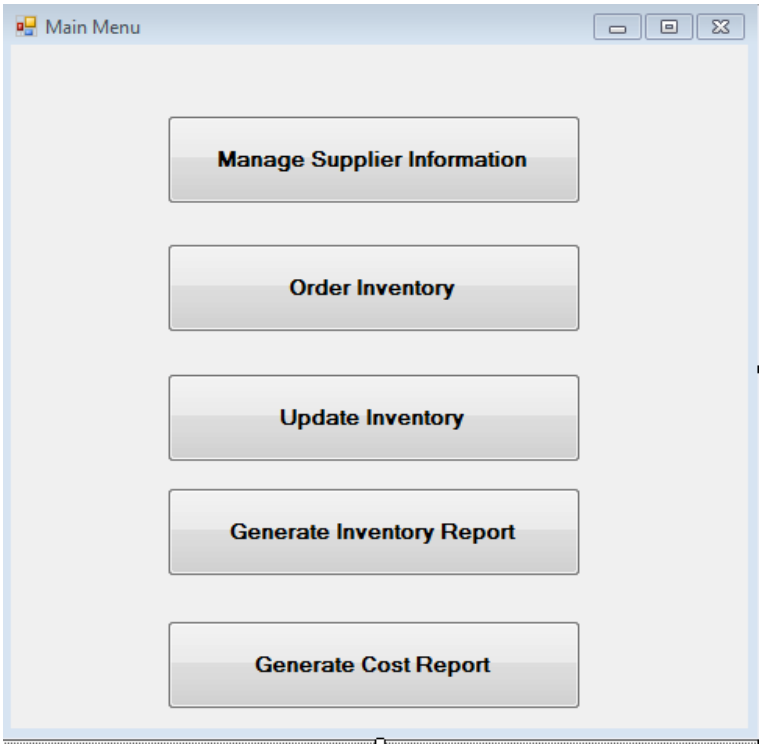
The user will fill out the form, entering the supplier's name, address, city, state, ZIP, phone number, and/or e-mail address, if available. Users can search by entering information in just one field should they desire. Once the supplier's pertinent information has been entered, the user will click the "SEARCH" button located at the bottom of the form. The user will then be greeted by a list of suppliers that meet the search requirements. All supplier contact information will be shown in this list, giving users easy access to the information they may need.

SupID	SupName	SupStreet	SupCity	SupState	SupZip	SupPhone
1	Atkinson Milling Co, Inc.	95 Atkinson Mill Rd.	Selma	NC	27576	919-965-3547

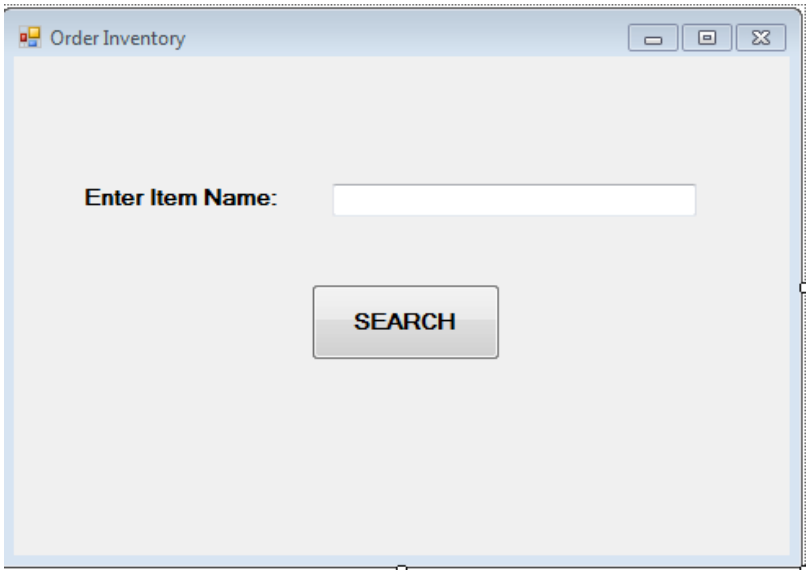
How to Order Inventory:

Login to the Barbee's Seafood system using your username and password.

If login is successful, the main menu screen will appear. Select "Order Inventory."



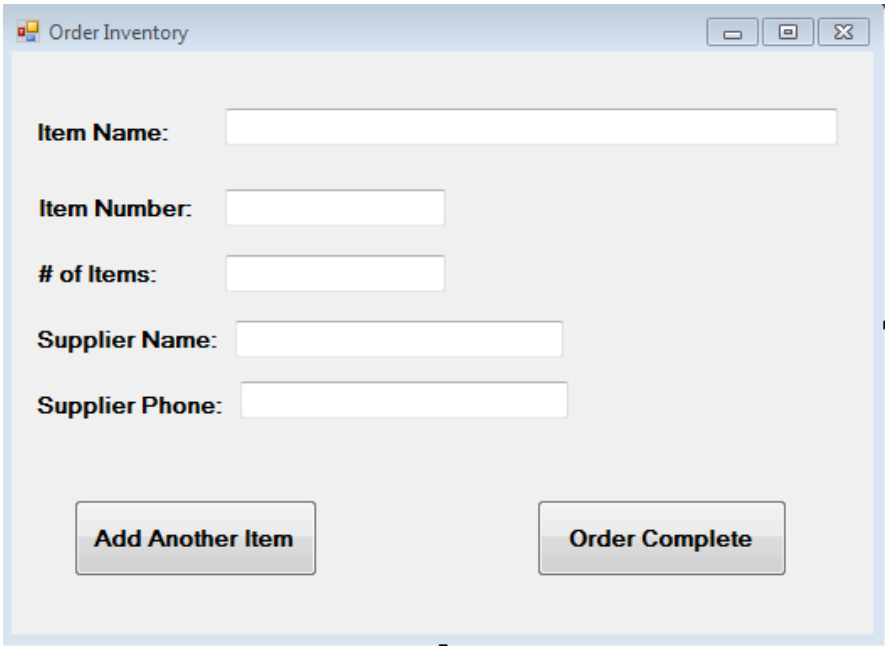
Once the user selects "Order Inventory," the order inventory screen will appear. The screen prompts the user to search for the item name. The user will enter the item name they wish to order and click search.



The system then displays matching records related to the item name searched; showing item name, item number, item description, and the supplier's contact information that the item is from.

1	12 oz. Cups	12	Paper Products	$2.49	North Carolina Paper Co.
2	16 oz. Cups	12	Paper Products	$2.69	North Carolina Paper Co.
3	12 oz. Lids	12	Paper Products	$1.49	North Carolina Paper Co.
4	16 oz. Lids	12	Paper Products	$1.69	North Carolina Paper Co.
5	Napkins	10	Paper Products	$3.99	North Carolina Paper Co.
6	Lettuce	8	Veggies	$0.99	Performance Foodservice
7	Green Beans	10	Veggies	$6.99	Performance Foodservice
8	Apple Sauce	10	Veggies	$5.99	Performance Foodservice
9	Order Pads	15	Office	$1.99	North Carolina Paper Co.
10	Paper	3	Office	$3.99	North Carolina Paper Co.
11	Clorox	3	Cleaning	$2.50	Performance Foodservice
12	Hand Soap	6	Cleaning	$1.99	Performance Foodservice
13	Dish Detergent	4	Cleaning	$3.99	Performance Foodservice
14	Large Shrimp	4	Seafood	$26.99	Capt. Jim's Seafood Market
15	Baby Shrimp	3	Seafood	$24.99	Capt. Jim's Seafood Market
16	Flounder	6	Seafood	$19.99	Seaview Crab Company
17	Sea Mullet	5	Seafood	$14.99	Seaview Crab Company
22	Croaker	3	Seafood	$14.99	Seaview Crab Company
23	Trout	3	Seafood	$12.99	Murray L Nixon Fishery, Inc.
24	Catfish	2	Seafood	$10.99	Murray L Nixon Fishery, Inc.

The user then clicks on the item number that corresponds with the item they wish to order. The system then displays the order inventory form.



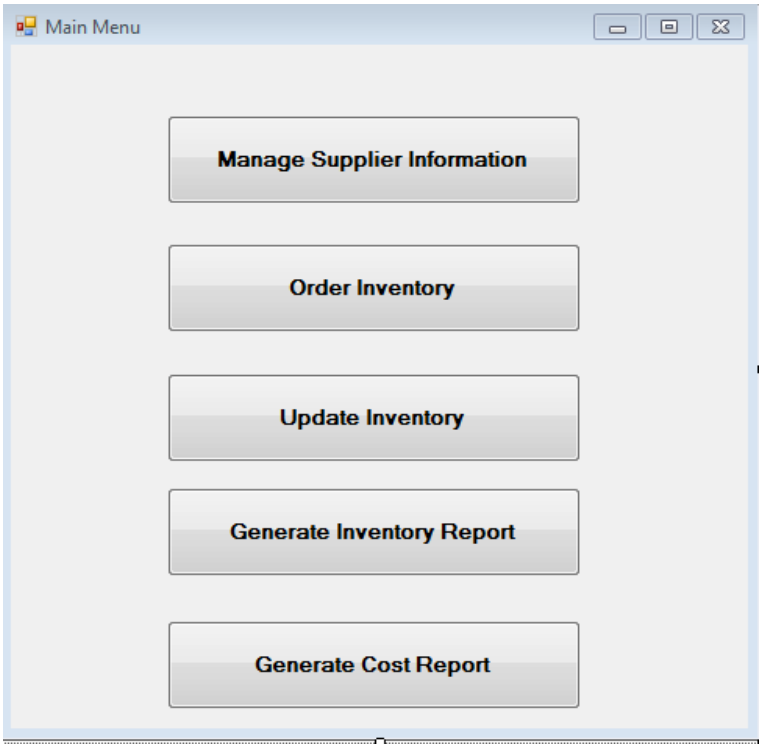
The user will then key in the details of the order to be placed such as quantity and date needed. After the form is filled out the user clicks submit.

The user is then prompted to save and upon clicking save, the user is returned to the Order Inventory Screen. If the user wishes to order any further inventory items then they repeat the preceding steps. If the user is finished, click Finish. The user will be returned to the Main Menu screen.

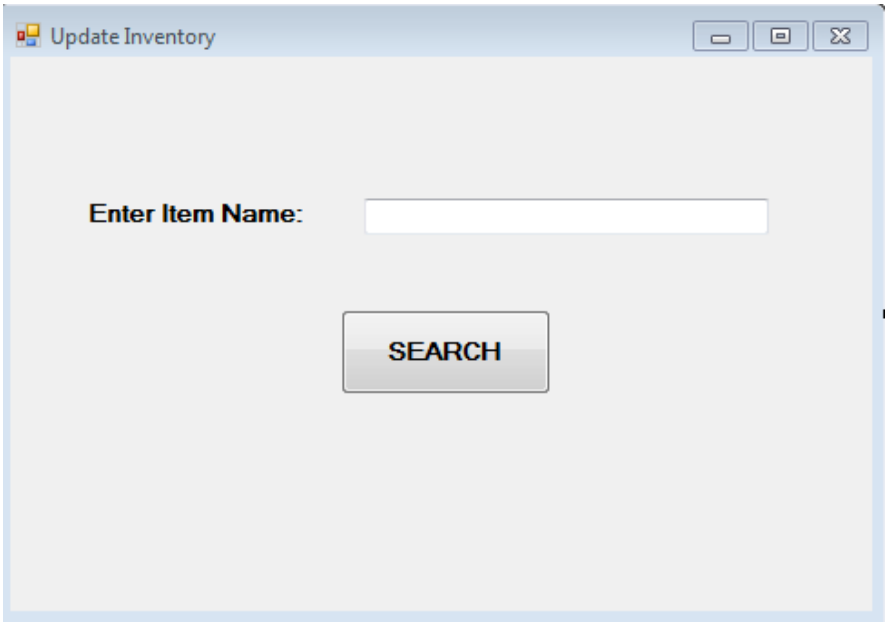
How to Update Inventory:

Login to the Barbee's Seafood system using your username and password.

If login is successful, the main menu screen will appear. Select "Update Inventory."



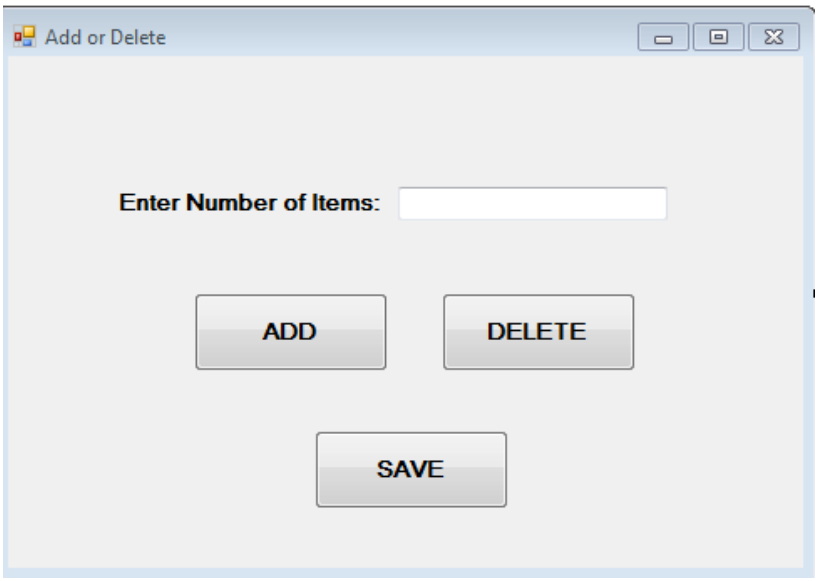
Once the user selects "Update Inventory," the update inventory screen will appear. The screen prompts the user to search for the item name. The user will enter the item name they wish to update and click search.



The system then displays matching records related to the item name searched. The user then clicks on the item number that corresponds with the item they wish to update.

ItemID	ItemName	ItemQty	ItemCtgy
1	12 oz. Cups	12	Paper Products
2	16 oz. Cups	12	Paper Products
3	12 oz. Lids	12	Paper Products
4	16 oz. Lids	12	Paper Products
5	Napkins	10	Paper Products
6	Lettuce	8	Veggies
7	Green Beans	10	Veggies
8	Apple Sauce	10	Veggies
9	Order Pads	15	Office
10	Paper	3	Office
11	Clorox	3	Cleaning
12	Hand Soap	6	Cleaning
13	Dish Detergent	4	Cleaning
14	Large Shrimp	4	Seafood
15	Baby Shrimp	3	Seafood
16	Flounder	6	Seafood
17	Sea Mullet	5	Seafood
22	Croaker	3	Seafood
23	Trout	3	Seafood
24	Catfish	2	Seafood
25	Oysters	4	Seafood

The the user will be prompted to enter the number of items they wish to add or delete. The user will then choose to Add or Delete the number of items.

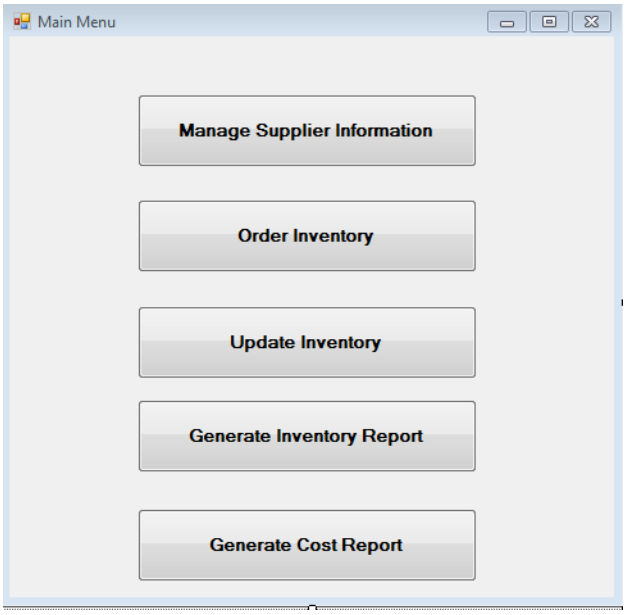


The user will be returned to the update inventory screen when they click Save. If the user wishes to make changes to another inventory item, enter the item name and click search. If the user is finished, click Finish. The user will be returned to the Main Menu screen.

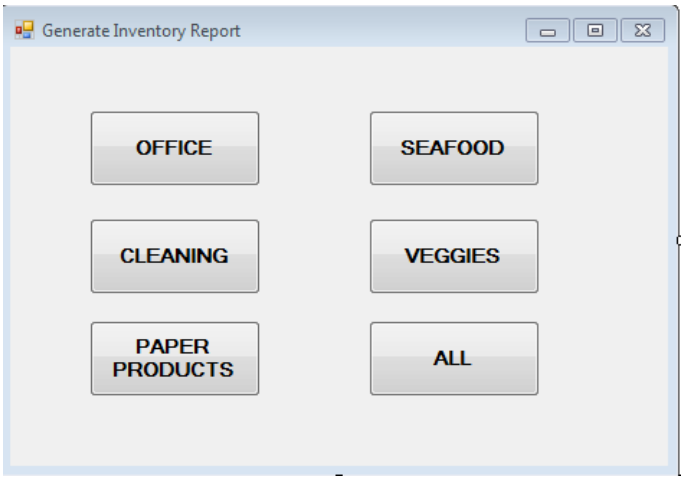
How to Generate an Inventory Report:

Login to the Barbee's Seafood system using your username and password.

If login is successful, the main menu screen will appear. Select "Generate Inventory Report."



Once the user selects "Generate Inventory Report," the generate inventory report screen will appear. The user will then select what type of report they wish to view. The user can choose to see a report on a particular category (office, seafood, cleaning, veggies, paper products), or they can choose to see a report for all inventory.



Once the user selects the type of report they wish to see, the system will display the chosen report.

Inventory Report

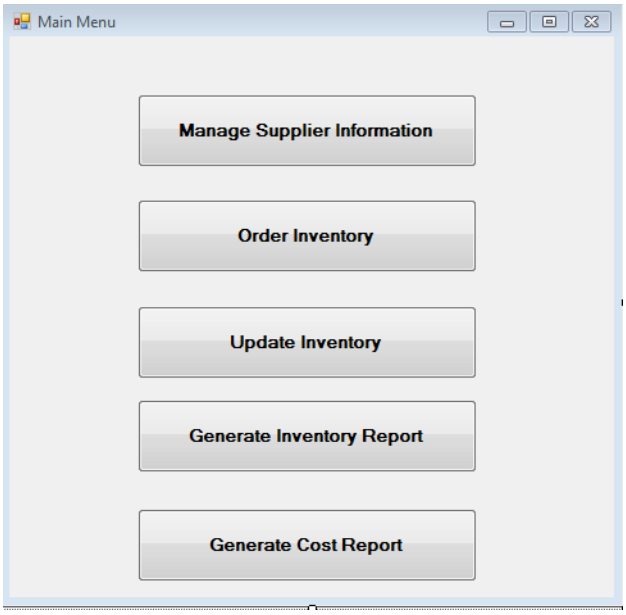
Sunday, March 17, 2013
7:48:37 PM

Item Number	Item Name	# in Stock
2	12 oz. Cups	12
3	16 oz. Cups	12
4	Napkinks	10
5	Lettuce	8
6	Green Beans	10
7	Apple Sauce	10
8	Order Pads	15
9	Paper	3
10	Clorox	3
11	Hand Soap	6
12	Dish Detergent	4

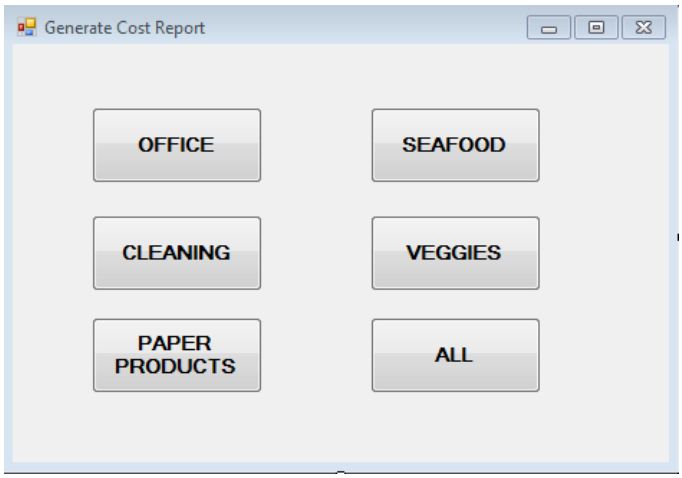
How to Generate Cost Report:

Login to the Barbee's Seafood system using your username and password.

If login is successful, the main menu screen will appear. Select "Generate Cost Report."



Once the user selects "Generate Cost Report," the generate cost report screen will appear. The user will then select what type of report they wish to view. The user can choose to see a report on a particular category (office, seafood, cleaning, veggies, paper products), or they can choose to see a report for all inventory.



Once the user selects the type of report they wish to see, the system will display the chosen report.

Cost Report

Sunday, March 17, 2013
7:44:07 PM

Item Number	Item Name	# in Stock	Item Cost	Total Cost of Items
2	12 oz. Cups	12	$2.49	$29.88
3	16 oz. Cups	12	$2.69	$32.28
4	Napkinks	10	$3.99	$39.90
5	Lettuce	8	$0.99	$7.92
6	Green Beans	10	$6.99	$69.90
7	Apple Sauce	10	$5.99	$59.90
8	Order Pads	15	$1.99	$29.85
9	Paper	3	$3.99	$11.97
10	Clorox	3	$2.50	$7.50
11	Hand Soap	6	$1.99	$11.94
12	Dish Detergent	4	$3.99	$15.96

Project Plan

Id #1

Focus Area: Project Plan

Activities Involved:

1. Project Plan — Completion Date: 02/05/2013
   Updated: 02/20/2013
   Updated: 03/20/2013
   Updated: 04/03/2013
   Updated: 04/18/2013
   Updated: 05/02/2013

2. Timesheets — Completion Date: 02/5/2013
   Updated: 02/21/2013
   Updated: 03/21/2013
   Updated: 04/03/2013
   Updated: 04/18/2013
   Updated: 05/02/2013

Start Date: 01/30/2013
End Date: 02/03/2013
Duration: 4 days
Complete: YES

Id#2

Focus Area: Vision Document

Activities Involved:

1. History & Business Description — Completion Date: 01/31/2013
2. Current Environment — Completion Date: 01/31/2013
3. Problems with system — Completion Date: 01/31/2013
4. System Objectives — Completion Date: 01/31/2013
5. Expected Benefits — Completion Date: 01/31/2013
6. Shareholders — Completion Date: 01/31/2013
7. Hardware & Software Requirements — Completion Date: 02/21/2013
8. Context Diagram — Completion Date: 02/21/2013

Start Date: 01/28/2013
End Date: 02/21/2013
Duration: 26 days
Complete: YES

Id#3

Focus Area: Use Case Package

Activities Involved:

1. System Use Case Diagram — Completion Date: 02/14/2013
2. Use Case Specifications — Completion Date: 02/21/2013

Start Date: 02/01/2013
End Date: 02/21/2013
Duration: 21 days
Complete: YES

Id#4

Focus Area: Design Package

Activities Involved:

1. Forms & Report- Mock-ups — Completion Date: 03/17/2013
2. Navigation Diagram — Completion Date: 03/16/2013
3. Entity-Relationship Diagram — Completion Date: 03/21/2013
4. Data Flow Diagrams — Completion Date: 03/21/2013
5. Hardware and Software Specifications — Completion Date: 03/21/2013
6. Program Plan — Completion Date: 03/21/2013

Start Date: 02/22/2013
End Date: 03/21/2013
Duration: 28 days
Complete: YES

Id#5

Focus Area: Structured Walkthrough

Activities Involved:

1. Program Plan — Completion Date: 04/04/2013
2. Flowchart — Completion Date: 04/04/2013
3. Inputs & Outputs — Completion Date: 04/04/2013
4. Program Code — Completion Date: 04/04/2013
5. Challenges, problems, discoveries — Completion Date: 04/04/2013

Start Date: 03/22/2013
End Date: 04/04/2013
Duration: 14 days
Complete: YES

Id#6

Focus Area: Training Plans

Activities Involved:

1. Training modes — Completion Date: 04/18/2013
2. User manual — Completion Date: 04/18/2013

Start Date: 04/05/2013
End Date: 04/18/2013
Duration: 14 days
Complete: YES

Id#7

Focus Area: Project Implementation

Activities Involved:

1. Project Final — Completion Date: 05/02/2013

Start Date: 04/20/2013
End Date: 05/02/2013
Duration: 13 days
Complete: YES

Project Assessments

Jessica Balazsi's Assessment

It was my idea to use Barbee's Seafood for this project. I know the owners and worked at Barbee's Seafood during high school. I was actually working at Barbee's Seafood on Friday nights to help during their busy season at the beginning of this project. I was our group's primary contact to collect information about Barbee's. I interviewed the co-owners in the very beginning to find out the history of the company and to identify current problems with their business processes. Due to my knowledge of the company and the interview I had with owners, I contributed a great deal to the vision document. I wrote the history, business description, and problems observed. I created the PowerPoint for the milestone 1 presentation.

For milestone 2 I wrote the login use case and the update inventory use case. I also created the rough draft version of the use case diagram. I contributed a great deal to the PowerPoint for the milestone 2 presentation. We received feedback that the update inventory use case was confusing and that our inputs were the same as what was entered. Writing the update inventory use case was challenging for me initially. I really had to step back and try to think about the user end of the use case, and how the system should work for the user. Once I did this I was able to write the use case. I count this use case as my first major challenge with the project.

Designing the mock-up forms and reports was my job for milestone 3. I also created the sample reports and the PowerPoint for Milestone 3. I compiled everyone's individual parts into one document to submit. This was not our best PowerPoint in terms of the background style. Mr. O'Dor pointed out that it was hard to read our words on a few slides due to the gradient background. I have learned a lot about the appearance of a PowerPoint for an affective presentation.

I mainly worked on the PowerPoint for Milestone 4. I did research naming conventions and data dictionary to make sure we understood what was needed to complete Milestone 4.

Around Milestone 5 is when I started working in Visual Basic to start building the system. I feel our biggest mistake with this project was waiting so late in the game to build the system. We had laid out all of the plans and even created the forms in Visual Basic for how we wanted the actual system to look. We just lacked the actual system in working condition. I completed the training documentation for update inventory. I also created the PowerPoint for this presentation and compiled all of the documentation into one document.

For milestone 6 I worked on combining all of the previous milestone documentation into one final document. I also created the PowerPoint for the final presentation. In the beginning, I created the original project plan. I was also responsible for completing the milestone evaluations and updating the project plan for each milestone.

Nick Klisures' Assessment

This semester and project were quite the challenge. That being said, I am glad I am a part of Barbee's Seafood group. We really helped each other through this in every step along the way and kept each other on track.

From the start, we set and exhibited a high level of effective communication, hands down the most significant component of a successful team. We got underway almost immediately with exactly what we wanted to do with this project by implementing project planning early. I found it very helpful to have the 2 walk throughs, especially the initial conceptual walk through. That really helped us narrow our scope into a feasible plan of action.

We all did a great job sticking to what we drafted out in the beginning and managing our meeting times well, usually twice a week for an hour or so. We sailed smoothly until about milestone 3, things got a little hairy. It was difficult to actually implement the design as we are novice at building systems and even though we had use cases, it was still hard to think of everything possible to create an error proof, fully functioning system. We pulled together and got it done but I feel that waiting until milestone 5 to build our system was our biggest shortcoming.

I felt we did very well though on the project for the constraints given on time and budget. I witnessed the team grow in experience with each component that entails this type of project, and it was great to see, feel, and be a part of this all. I have enjoyed working with my team. They are professional, caring people that will excel in whatever field they plan to pursue.

Isai Pallango's Assessment

Barbee's Seafood owners need assurance that their IT projects are being planned and executed effectively. Most important they need timely, accurate, and objective feedback on project status. Project status represents a project's prognosis for delivering to its expectations. In other words the scope, schedule, cost, quality, and benefits.

The most likely source for receiving a realistic diagnosis is from our group and the work we have completed throughout this semester. Although we are the designers, we believe that our knowledge gained throughout this semester empowers us to be independent of our project or someone who isn't associated, or who doesn't stand to gain or lose, from the status or results of a project.

Barbee's Seafood has been involved both internal and external with all our projects and have demonstrated a tendency to engage in order to protect their interests in the project. Engaging someone who is truly independent also brings a fresh set of eyes and perspectives to a project, and our group truly believes that professor Seeman has provide these assessments.

Throughout the completion of our projects this semester, professor Seeman has provided our group points of views like seeing things that may be invisible to our group. Our group truly feels that our sponsor, which is Barbee's Seafood needs to own and sponsor the process in order to receive a realistic and objective project assessment.

This has enabled our group to provide Barbee's Seafood an explanation of what they need to know to effectively guide the assessment process.

Lessons Learned

We have learned a great deal about the SDLC and have gained valuable insight on what it truly means to be a systems analyst, one of the most crucial stakeholders in the development of a system (champion). We have learned how important documentation is, as our group has had to look back several times in order to stay on track with our requirements determination. Proper documentation also assisted us in all getting on the same page of the direction and clarity of the project to be completed, and what results we wish to see at the end of it all.

Regarding a team work aspect, we soon discovered just how quick deadlines approach. We firmly feel that if we had another similar project we would work on the project a little everyday instead of procrastinating. This would also improve the overall quality of the system too. To be a successful team, each member must step out of their comfort zone to be effective, whether it's throwing new ideas into the pot, criticizing other member's work for the better of the project, or performing tasks outside of our individual outlined/expected roles. However, we could have adhered more to our respective team roles, which may have caused our efficiency and organization to in turn be stronger.

Our team took a lot away from presenting each milestone, we all feel our presentation skills have improved greatly. Our team communication was superb. Emails, texts, and calls were always answered and whenever there was a question the team supported one another with whatever assistance possible. Working in teams in MIS is critical and the experience we have gained in this capstone class will certainly help guide us through the beginning of our IS/IT career paths.

Milestone Evaluations

Milestone 1: Evaluation

Progress and Accomplishments for the Milestone

- As a team, we chose Barbee's Seafood, Inc. for the project.
- Team member, Jessica Balazsi, contacted Barbee's Seafood to inquire about the business processes in use and the history of the company. She informed the rest of the team members of her findings.
- We identified problems with the current system.

- We identified expected benefits of the proposed system.

Problems Encountered with the Milestone

- Lost a group member and added another group member last minute.
- Completed work at the last minute.
- Due to a misunderstanding, we missed the deadline for submitting our milestone evaluation, project plan and timesheets.

Activities for the Upcoming Milestone

- Schedule a meeting to discuss Milestone 2
- Complete the use case package
- Update timesheets
- Update project plan
- Complete milestone evaluation
- Deliverable due 2/21/13

Milestone 2: Evaluation

Progress and Accomplishments for the Milestone

- Completed the Vision Document
- During a team meeting, we decided as a group which use cases were needed to complete the Use Case Package.
- Created Use Case Diagram

- Completed Use Case Specifications
- Identified Non-Functional Requirements
- Developed a Context Diagram
- Updated Project Plan and Timesheets

Problems Encountered with the Milestone

- We had to meet on Skype for our first meeting due to not having a Centra session set up. There were some technical difficulties with Skype.
- We had technical difficulties with Centra during our second meeting for this Milestone.

Activities for the Upcoming Milestone

- Schedule a meeting to discuss Milestone 3
- Make corrections to Analysis Package if necessary
- Design proposed system architecture
- Decide on proposed hardware and software specifications
- Design proposed User Interface Elements
- Design proposed Process Model
- Design proposed Data Model
- Deliverable due 3/18/13

Milestone 3: Evaluation

Progress and Accomplishments for the Milestone

- Corrected Use Case Package
- Completed Decomposed DFDs
- Completed ERD

- Created Mock-Up Forms and Reports
- Created Sample Reports
- Created Program Plan
- Completed Hardware and Software specifications
- Updated Project Plan and Timesheets

Problems Encountered with the Milestone

- Work schedules were our main problem this milestone. Finding an available time for everyone to meet was almost impossible.

Activities for the Upcoming Milestone

- Schedule a meeting to discuss Milestone 4
- Make corrections to Design Package if necessary
- Data Dictionary
- Standard Naming Conventions
- Data for testing
- Test Plan

Milestone 4: Evaluation

Progress and Accomplishments for the Milestone

- Team meeting to discuss milestone objectives
- Completed Database Development

- Completed Program Development
- Completed Test Plan
- Created a PowerPoint for Walkthrough Presentation
- Updated Project Plan and Timesheets

Problems Encountered with the Milestone

- There was some confusion about how we needed to present the information in this milestone to the rest of the class.

Activities for the Upcoming Milestone

- Schedule a meeting to discuss Milestone 5
- Prepare a training session
- Create a user manual-documentation of the system for the user
- Update Project Plan and Timesheets
- Milestone Evaluation

Milestone 5: Evaluation

Progress and Accomplishments for the Milestone

- Team meeting to discuss milestone objectives

- Created a user manual-documentation of the system for the user
- Created a PowerPoint for Training Presentation
- Updated Project Plan and Timesheets
- Milestone 5 Evaluation

Problems Encountered with the Milestone

- Writing detailed training documentation was difficult for certain parts of the system due to not having the system running at its full capacity.

Activities for the Upcoming Milestone

- Schedule a meeting to discuss Final Presentation
- Revise and complete Final Documentation
- Update Project Plan and Timesheets
- Prepare individual project assessments
- Rehearse Final Presentation

Timesheets

Instructor Evaluation Notes

Milestone 2

Jessica, Nick, Isai and Tom:

Your presentation just ended without showing much beside your use cases. I agree with Mr. O'Dor's comments which I have attached. Your presentation grade is 90

Your documentation look pretty good. The following are my technical observations

1. On your use case diagram, your actor is not labeled.
2. Shouldn't UC 1 just have access to the system as its output since the printing etc is covered in other use cases?
3. UC2 and UC3 lists source on it the right side of major outputs. It should be Destination. For UC2 along with the owner, include the file were this info will be kept.
4. UC 4 Update Inventory is confusing. Your inputs are the same as what is entered. How does total cost happen? Is it calculated. Same hold for total inventory. Shouldn't all of this info have an inventory file as the final destination?

Best regards,
Dr. Seeman

Milestone 3 comments

Isai, Tom, Jessica and Nick:

Your presentation comments from Mr O'Dor are attached. I thought your presentation was uneven with some very good aspects (Jessica's introduction and Tom's walk through) and some not so good (Nick's fast start with no introduction and Tom's abrupt ending) Your DFD package should always start with your context level diagram (even though you showed it in earlier presentations). Also you don't have arrows on your flow lines so we can't tell whether the flows are inflows or outflows. Your presentation grade is 91.

Your documentation lacks a table of contents and executive summary. There is a big disconnect between your context level diagram (with 4 flows) and the level 0 diagram with many flows. The who purpose of the leveling is to show more detail at lower levels AND to be able to follow the information from level to the next. Your grade is 89

Regards, Dr. Seeman

Milestone 5 comments

Isai, Jessica, Tom and Nick:

Your documentation is good except that it lacks an overview of the system and an introduction to the training. . The instructions themselves were clear and easy to follow. Your grade is 92

Your presentation was also well organized and thorough. Good job. Your grade is 94.

Dr. Seeman